

**REPUBLIC OF IRAQ**

**MINISTRY OF PLANNING**

**Iraq “Social Fund for Development” Project  
(SFDP)**

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN  
(ESMP)**

**FOR THE  
REHABILITATION  
OF**

**IRRIGATION SCHEME FOR BURJI VILLAGE**

**IN  
DUHOK GOVERNORATE**

**04<sup>TH</sup> MAY 2020**

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**List of Abbreviations**

CDGs	Community Development Groups
ESMP	Environmental and Social Management Plan
EHS	Environmental, Health, and Safety
ESMF	Environmental and Social Management Framework
GIIP	Good International Industry Practice
GOI	Government of Iraq
GRM	Grievance Redress Mechanism
GBV	Gender Based Violence
MOE	Ministry of Environment
MOP	Ministry of Planning
MSDS	Material Safety Data Sheets
OP	Operational Policy
PAPs:	Project Affected Peoples
PMO	Project Manager Office
PPE	Personal Protective Equipment
RE	Resident Engineer
SEA/SH	Sexual Exploitation and Abuse/ Sexual Harassment
SFD	Social Fund Development
WB	World Bank
WHO	World Health Organization

## EXECUTIVE SUMMARY

INTRODUCTION	<p>This ESMP is prepared in accordance to the ESMF requirements of the SFD project. The main objective of the ESMP is to assess the environmental and socio-economic impacts of the subproject (during construction and operation phases) and to propose mitigation measures to mitigate the impacts associated with subproject. This subproject includes the rehabilitation of a small scale irrigation scheme for Burji village in Duhok governorate. This irrigation scheme rehabilitation of the irrigation scheme is expected to result in significant socio-economic benefits for the local communities and surrounding areas as it will provide water to area surround the village for agricultural purposes and daily requirements and also it will provide water that will be used as a raw water source for to be used as drinking water.</p>			
PROJECT DESCRIPTION	<p>The subproject consists of reconstruction of an irrigation water intake, installation of a water screen, installation of storm water drainage system, and construction of a water tank for the Burji village in Al-Duhok governorate. The rehabilitation process will need about 15-20 worker per day. Workers are expected to be hired locally, however if a construction camp is deemed necessary, it will be installed on vacant state-owned land. Also, equipment and construction materials will be stored on vacant state-owned land. The anticipated duration of all works is around 120 days including mobilization and demobilization of contractor.</p>			
ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS	Climate	<p>Duhok governorate is located in the northern part of Iraq. Duhok governorate's terrain mostly consists of mountain slopes, hills and valleys. The climate of Duhok governorate is hot and dry in summers and mild in winters. The average temperature in Duhok is 18.5 °C. The warmest month of the year is July, with an average temperature of 31.9 °C. Most precipitation falls in February; Rainfall averages 616 mm yearly.</p>		
	Air quality	The ambient air quality is within normal range.		
	Land	No additional land for the work is needed to proceed with these activities.		
	Biodiversity	No protected areas or endangered species (there is no critical or high biodiversity values that might be affected) in the vicinity of the sites.		
	Culture heritage	The sites adjacent areas do not include any historical or cultural sites.		
POLICY AND	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"><b>Applicable Iraqi laws</b></td> <td style="width: 50%; text-align: center;"><b>Applicable WB Policies</b></td> </tr> </table>		<b>Applicable Iraqi laws</b>	<b>Applicable WB Policies</b>
<b>Applicable Iraqi laws</b>	<b>Applicable WB Policies</b>			

LEAGAL FRAMEWORK	<ul style="list-style-type: none"> <li>• Law no. 37 of 2008 MoE roles and responsibilities.</li> <li>• Law no. 27 of 2009 Protection of Environment</li> <li>• Regulation 2 of 2001 Preserving water resources</li> <li>• Law No.3,1997 Environment protection</li> <li>• Law No. 55. 2002 Heritage and antiques</li> </ul>	<ul style="list-style-type: none"> <li>• OP 4.01 Environmental Assessment</li> <li>• OP 4.12 Involuntary Resettlement</li> <li>• OP 4.11 Physical and Cultural Resources</li> <li>• WB General Environmental, Health, and Safety guideline</li> <li>• Grievance Redress Service</li> </ul>
ENVIRONMENTAL AND SOCIAL IMPACT ANALYSIS	<b>• Environmental Receptor</b>	<b>Impact Significance</b>
	Air Quality	Low
	Noise	Low
	Water Resources	Medium
	Soil	Low
	Solid and hazardous wastes	Low
	Flora & Fauna	Not significant
	Topography and landforms	Not significant
	Impacts on local traffic	Not significant
	Health and Safety	High
	Socio-Economic impacts	Low
Child Labor	Medium	
PUBLIC CONSULTATION RESULTS	Two modalities of consultations were carried out for this subproject. Public consultation was conducted in the village with 14 participants. The second approach was one-to-one interviews with both men and women to have their views and concerns of potential impacts during implementation. The number of individuals interviewed was 5 women and 9 men.	
GRIEVANCE REDRESS MECHANISM	The SFD started procurement process with one of the information technology companies in the process of establishing a free hotline. The company will submit initial report describe the (MIS, Website and the GRM system) after ending the curfew. Meanwhile, in order to comply with the WB requirements, SFD has temporary assigned three staffs as focal points with their cell phone numbers to be disseminated at the site for receiving calls and handling complaints. The contact details will be posted at site signboard and the complaint boxes will be installed in each location. In the absence of specialized GBV, the GRM operator should be trained on how to manage SEA/SH cases confidentially and empathetically, in line with the WB Good Practice Note on addressing SEA/SH.	

# Main Report

## 1. INTRODUCTION

According to the Environmental and Social Management Framework (ESMF) which was prepared for the Social Fund for Development project (SFDP) and disclosed locally and on the WB website, an Environmental and Social Management Plan (ESMP) should be prepared, cleared and publically consulted upon and disclosed prior to the commencement of any construction activities for all the subproject's components.

This ESMP was developed to identify, assess and mitigate the environmental and social risks and impacts associated with the rehabilitation of irrigation scheme for **Burji** village in Duhok governorate.

The ESMP was prepared by an independent consultant according to requirements of the World Bank (OP 4.01), and Iraqi regulations. The ESMP should be implemented by all relevant parties.

The objectives of this ESMP are to:

- Provide practical and achievable actions to ensure that the subprojects adverse environmental and social impacts are properly avoided or mitigated.
- Illustrate the institutional arrangements for implementing and monitoring the mitigation actions
- Integrate community views and input on the environmental and social impacts of these subprojects
- Comply with WB and national requirements
- Provide information to the local community on the subprojects activities, the associated risks and impacts, mitigation measures and Grievance Redress Mechanism (GRM) system.

## 2. PROJECT DESCRIPTION

This subproject involves the rehabilitation of an irrigation scheme in **Burji** village in the Governorate of Duhok Northeast of Iraq. This village suffers from the deterioration of the infrastructure as the irrigation channel that carries the water to the village suffers from damages and leaks. The location of this village is shown in the figure below:

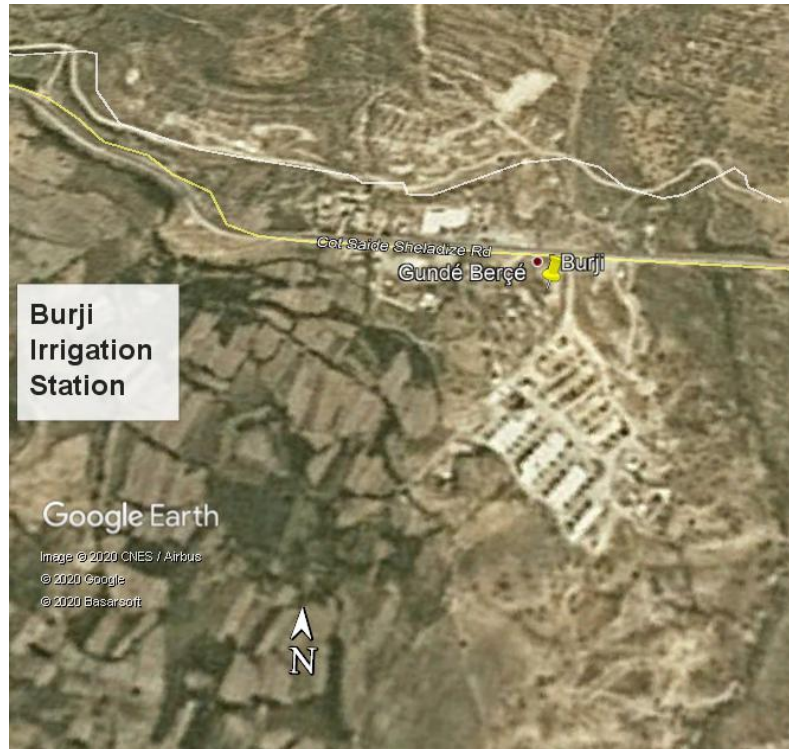


Figure 1: location of Burji village and the current status of the channel (google earth)



## 2.1 Objective of the Works

The objective of this subproject is to rehabilitate the small-scale irrigation scheme in Burji village. This rehabilitation of the irrigation scheme is expected to result in significant socio-economic benefits for the local communities and surrounding areas as it will provide water to area surround the village for agricultural purposes and daily requirements and also it will provide water that will be used as a raw water source for to be used as drinking water.

## 2.2 Current irrigation system

The village is depending on the existing irrigation system for cultivations of fruits and nuts crops mainly. This irrigation system is a continuous system that relies on meltwater from snow on the top of surrounding mountains and rains. The meltwater and rains in the area formed thin water streams that extend from the mountains to a small natural water basin where the water is stored naturally. When the basin overflows, the excess water seeps into the ground in the surrounding area and irrigate natural trees. The existing village intake is located in the natural basin and allows meltwater to go through the sloped channel at an average rate of 25 liter per second. The concrete channel, which extend for 2.38 Km connects the intake to an existing water storage tank with a capacity of (360m<sup>3</sup>). The farms which use the meltwater for irrigation are located along the channel and receive the water though small irrigation gates. The water stored in the tanks which represent the only source of water for the village is then treated and used for drinking.

This irrigation system suffers from deterioration, where the intake suffers from deterioration represented by erosion, corrosion of reinforcement, and cracking of concrete due to its old construction. In addition, the current channel has many cracks and that increase the leakage and impact the quantity of the water. Moreover, there is a need to increase the capacity of the storage tank to provide sufficient quantity of water to the people in the village

The 2.38 km long channel is currently crossing over a 10 m wide Wadi at a Height of about 4 m from the ground. The channel is supported in the Wadi by reinforced concrete columns that are in deteriorated conditions because of the rains and floods in the wadi area.

Also the channel is passing under an asphalt road though a culvert.

## 1.2 Scope of Work

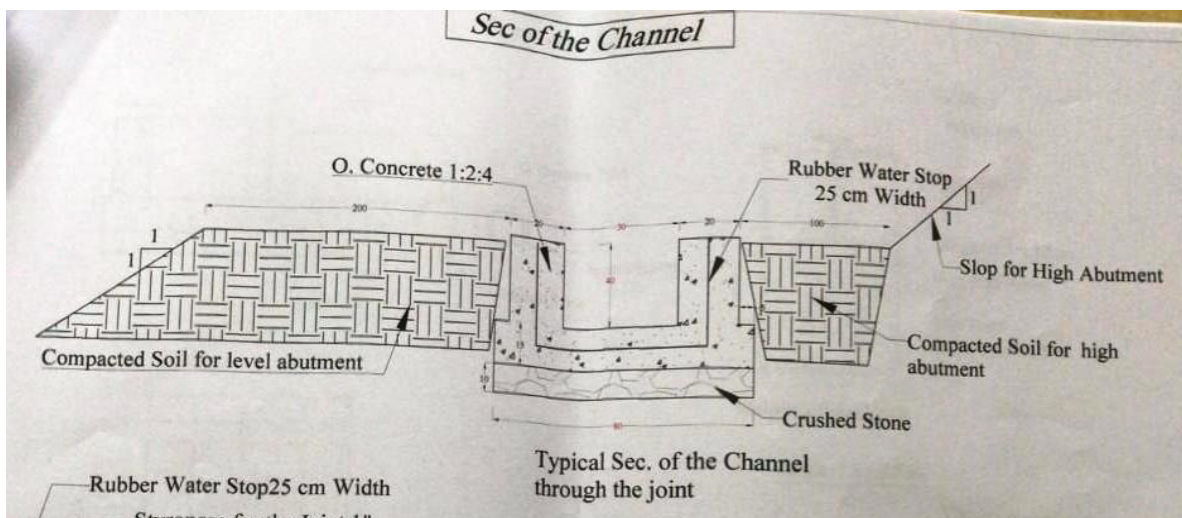
. The proposed activities for this subproject will include:

1. Reconstruction of an Irrigation water intake waterfall with the same dimensions of the old one to allow the same flow rate of water (25 L/sec)
  - The work will include: construction of the reinforced concrete foundation and wall of the water intake. Also install an iron gate

and a water screen to control the quantity of water passes to the sloped channel.

2. Rehabilitation of the sloped irrigation channel 2389m

- Construction of the concrete foundation of the channel with length of 2389m, width of 0.3m, and height 0.4m as shown in figure below which shows the cross-section of the channel.
- Construction of the concrete walls of the irrigation channel with a thickness of (25) cm. The work also includes the use of water stop seals in the joints area.
- Install four gates along the channel to distribute the water to the farms close to the channel.



**Figure 2:** cross-section area of the irrigation channel with which shows the section and the compacted soil to support the channel's wall

3. Reconstruction of reinforced concrete columns to support the channel in the Wadi area and installation of a drainage system on the foundation for rain and flood protection

- Construction of reinforced concrete columns
- installation of curtain drains around the foundations of the two columns in the Wadi area. The curtain drain will protect the foundation and will keep the water in the wadi after bypassing the columns. this will require excavation of trench around the two columns, installation of drainage pipes, and backfilling the trench with gravel

4. Reconstruction of a box culvert for the irrigation channel (length 15m and width 30cm) to pass the water under the road that links between Deraluk and Amedi:

5. Construction of an additional water storage tank( $\approx 360\text{m}^3$ ) for the village

- Construction of storage tanks with a dimension of (14m\*12m\*2m), the activities will include: reinforced concrete foundation of the storage tank, reinforced concrete walls of the storage tank with a thickness of (25) cm and the use of water stop seals in the joints area.

The work will also comprise of some civil works such as excavation, lifting the soils and other waste produced during the excavation and also casting in some cases and as follows:

- Providing workers and all the surveying equipment required for the execution works.
- Conduct excavation work according to the dimensions and methodologies mentioned in the drawings with other considering the possibility of groundwater.

The anticipated duration of rehabilitation works is about 120 days with about 15-20 workers per day with about 95% of them are local workers and the rest are engineers and technicians that may be from the closest area.

### **2.3 Contractors Camp and Storage of Equipment**

The construction works will imply the setup of camps in the area near irrigation system if needed. The setup of camps will be established on vacant state-owned lands for storage of equipment and construction materials. The work activities will need about 15-20 local workers per day. If there are non-local workers, these workers will need to have their accommodation facilities in the camp, during the construction phase.

## **2. BASELINE CONDITIONS**

### **3.1 The Project Area**

The subproject is located in Duhok which is the northernmost governorate of Iraq, Duhok borders Turkey and shares internal boundaries with the governorates of Ninawa and Erbil (as shown in figure 2 below). The proposed location of this subproject will be in an area from flat to some hills and valleys.



**Figure 3 Map of Iraq on the right and Duhok governorate on the left.**

## **2.2 Environmental and Social Baseline Conditions**

The environmental baseline section is presented to give clear overview of the environmental and social conditions in the vicinity of the subproject location prior to commencement of works.

### **2.2.1 Climate**

Duhok governorate is located in the northern part of Iraq. Duhok governorate's terrain mostly consists of mountain slopes, hills and valleys. The climate of Duhok governorate is comparable to that of surrounding regions, with hot and dry summers and mild winters. The average temperature in Duhok is 18.5 °C. The warmest month of the year is July, with an average temperature of 31.9 °C. Most precipitation falls in February; Rainfall averages 616 mm yearly and is limited to the winter months.

### **2.2.2 Air Quality**

The subproject sites are located in open areas, so the expected concentration of air pollutants is low. Air pollutants in the villages are caused mainly from movement of vehicles and trucks. Therefore, the ambient air quality is expected to be within the WHO ambient air quality standards.

### **2.2.3 Site Topography and location**

The areas close to the subproject have some mountains, cliffs, and valleys. There are no protected areas or endangered species (there is no critical or high biodiversity values that might be affected) in the vicinity of the sites (more than 2 Km). There are no close buildings or sensitive receptors located to the subprojects site for more than 500m.

#### **2.2.4 Water resources**

The meltwater and rains flow on the mountain and form thin water streams that extend from high altitudes to a small natural water basin where the water is stored naturally. When the basin overflows, the excess water seeps into the ground in the surrounding area and irrigate natural trees. The existing village intake is located in the natural basin and allows meltwater to go through the sloped channel at an average rate of 25 liter per second. There is no significant difference between the quantities of water during the year. The quality of the water that this village is used (the only village that used this source) is very clear and there is no a lot of treatments are required to be suitable for drinking.

#### **2.2.5 Land Use**

The area adjacent to the project site is characterized as rural residential to agricultural in some area. However, the construction activities will not cause an impact on agricultural or make any crop damage.

#### **2.2.6 Flooding**

There are no records of flooding that occurred previously in the area. However, the accumulated water from the rain may create a flow which might need drainage to protect some structures in some area of the project.

#### **2.2.7 Noise**

Currently, there is no traffic congestion and consequently the existed noise level is within the normal levels near the working area.

#### **2.2.8 Heritage Environment**

There are no sites of historical or cultural importance in the area. There are no cemeteries, historical-cultural monuments, churches, mosques near these subprojects that need to be removed or will be impacted due to the rehabilitation activities.

#### **2.2.9 Traffic Level**

No traffic problem or traffic congestion will be expected during the operation phase. During the construction phase and for a specific section (where the culvert will be reconstructed) there will be a traffic divergence ( i.e construct one lane and allow to use the other lane to be in use until completing the road and then vice versa.

#### **2.2.10 Land Acquisition**

The irrigation channel will be built on same existed footprint of the old channel and hence there are no issues related to land acquisition. The implementation activities will not cause relocation of people and any individuals.

### 2.2.11 Social Aspects

The suggested path for the irrigation channel will be on the same footprint of the existing one, where no land or property expropriation will be needed. All the areas around the sites remain clear of any settlement or economic use and are ready for construction works, no interference is registered from the local community which is eager for the works to be completed.

## 3. LEGAL ASPECTS

### 4.1 Iraqi environmental legislations

During rehabilitation and operation phases of the project, the work must follow the Iraqi laws and regulations for the environmental standards and also the regulations related to the response of COVID-19. These are:

1. Laws of the environment protection No.3 issued in 1997 and its relevant published regulations. No environmental regulations for gaseous emissions, noise and other air pollution standards are in force and legally binding. However, limits for water disposal in any surface waters and main sewers are regulated according to the regulations no. (25)/1967 and their update modifications released from the Ministry of Health (MOH) and the Ministry of Environment.
2. New environmental framework Law No. 27 of 2009 by the Iraqi National Government was introduced but the executive decrees remain to be prepared. There are as yet no formally adopted requirements for environmental assessment.
3. Regulations governing contact with archaeological sites extend also to encompass developmental activities like the activities of construction and rehabilitation wherever these developmental activities lie within archaeological vicinity.
4. Regulations of the MOE on sanitary waste must be followed, and for the rubbles (construction & demolition waste) the regulations, legislations and instruction of both MOHE and MOCHPM.

**Table 1: Applicable Laws and Regulations in Iraq**

Law	Subject
Law no. 37 of 2008 for Ministry of Environment	Describes institutional arrangements of the Ministry of Environment and Outlines policies and roles and responsibilities toward protecting the environment.
Law no. 27 of 2009	Protection and Improvement of Environment Environmental protection from pollution resulted from petrol and natural gas extraction
Regulations no. 2 of 2001	Preserving water resources.
Law no. (55) Issued in 2002	Law of heritage and antiques
Law No. 37 of 2015.	Labor Law No. 37 of 2015.

For legal aspects, the work during construction and operation must follow the Iraqi laws and regulations for the Environmental Standards. These are laws of the environment protection No.3 issued in 1997 and the published regulations. No environmental regulations for gaseous emissions, noise and other air pollution standards are in force and legally binding. However, limits for water disposal in any surface waters and main sewers are regulated according to the regulations no. (25)/1967 and their update modifications released from the ministry of health and the ministry of the environment. Law of heritage and antiques no. (55) Issued in 2002, while for a sanitary waste (municipal) the regulations of the MOE must be followed, and for the rubbles (construction &demolition waste) the regulations, legislations and instruction of both MOHE and MOCHPM must be followed. It is important also to mention that, the contractor will sign employment agreement with all construction workers by following labor law of Iraq.

It should be noted that legislation relating to social safeguards issued in Iraq since 2003 has focused primarily on the ratification of international conventions and protocols on issues such as cultural heritage. As yet there are no formally adopted requirements for social assessments relating to these types of works. Hence, social safeguards issues remain very largely uncovered except to the extent they are referred to under environmental laws.

## **4.2 The World Bank Safeguards Policies**

In addition to the Iraqi laws and regulation the ESMP follows key policies and procedures of the World Bank; the following section presents the WB operational policies relevant to the rehabilitation and reconstruction of the irrigation system. The contractor should follow the international guidelines and practices such WHO guidelines related to COVID-19 WHO guidance on “Risk communication and community engagement (RCCE) readiness and response to the 2019 novel coronavirus (2019-nCoV)” (January 26, 2020)

- ❖ OP/BP 4.01 Environmental Assessment.
- ❖ OP/BP4.12 Involuntary Resettlement
- ❖ OP/BP 4.11 Physical Cultural Resources

## **4.3 WBG EHS: The Environmental, Health, and Safety (EHS) Guidelines**

These are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). When one or more members of the WB Group are involved in a project, these EHS Guidelines are applied as required by their respective policies and standards.

## 4. IMPACT ASSESSMENT AND MITIGATION MEASURES

### 5.1 Construction Phase

This section of the report describes the environmental and social impacts that are likely to result from the rehabilitation of the irrigation scheme, and the mitigation measures addressing them. The Environmental actions, procedures and responsibilities as required during the construction phase must comply with the available specifications, legislation, laws issued by the MOHE.

The construction contractor(s) will be responsible for compliance with the ESMP provisions during the construction phase of the subprojects. The contractor will be also in charge of undertaking construction works in a manner which complies with all relevant environmental procedures, adheres to all legislative requirements, and ensures that all environmental objectives associated with the contract are achieved. The overall assessment of the key environmental and social impacts is summarized below. According to the above environmental baseline and mitigation measures, it can be expected that the significant impact is low for most of the environmental receptors due to the minimum concentrations (as a background) for some parameters and medium impact for noise and child labor while health and safety has a high impact due to the fact this issue is related directly with the health and safety for the workers and staff as shown in the table below:

**Table 2: Summary of Impact Assessment during Construction**

	<b>Environmental Receptor</b>	<b>Impact Significance</b>
1	Air Quality	Low
2	Noise	Low
3	Water Resources	Medium
4	Soil	Low
5	Solid and hazardous wastes	Low
6	Flora & Fauna	Not significant
7	Topography and landforms	Not significant
8	Impacts on local traffic	Not significant
9	Health and Safety	High
10	Socio-Economic impacts	Low
11	Child Labor	Medium

### 5.2 Operational Phase

During the operational period, the project is expected to result in positive socio-economic outcomes for the local communities. Socially harmful consequences of irrigation scheme operation is not anticipated. However, the continued operation of a GRM for one year following opening of the water network for use will ensure that local community members have an accessible, fair and transparent means of reporting any emerging adverse impacts, and a means of obtaining mitigation.

## 5. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

In this section, the identified mitigation measures will be summarized. The responsibility for implementation of the mitigation measures will be mostly upon the contractor. However, the supervision and assurance that the mitigation measures are



implemented will be the responsibility of the Resident Engineer who represents the ministry as the Project Owner.

The Resident Engineer (RE) will be assisted by a team of environmental and social officers who will be responsible for supervising the daily activities of the contractor and will report non-compliances to the Resident Engineer in order to take necessary actions towards the contractor in addition to the OHS aspects. Regular supervision site visits will also be conducted by the PMO environmental/social officer in association with a qualified environmental and social consultant who will provide technical advice in case there is a need to modify or add new mitigation measures as work necessitates.

The costs of mitigation measures are estimated based on the average market rates for similar activities in Iraq and can be used as indicative costs. It is the sole responsibility of the contractor to estimate the costs associated with the recommended mitigation measures based on his work experience.

In terms of hazardous waste, the following mitigation should be followed:

- Provide adequate sanitation facilities serving all workers (mentioned in HSE).
- Paints with toxic ingredients or solvents or lead-based paints will not be used
- All waste should be deposited through licensed haulers/transporters to licensed and regulated landfill sites appropriate to the type of waste generated (e.g. solid, household, hazardous).

The following tables summarize the mitigation measures which are required to be undertaken to avoid any negative impacts on the environment. Responsibilities and estimated costs are also presented.

**Table 3: Mitigation Measures during Construction Phase.**

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
1	Air quality	<ul style="list-style-type: none"> <li>Enclosure or covering of inactive piles to reduce wind erosion.</li> <li>Loads in all trucks transporting dust-generating materials have to be sprayed with water to suppress dust, as well as wheels of means moving inside and outside of the construction-site.</li> <li>Limiting Speed for vehicles approaching the site to less than 40 km/hr. On site, speed limit should not exceed 20 km/hr.</li> </ul>	Contractor	Resident engineer	1000
		<ul style="list-style-type: none"> <li>Engines of vehicles and other machinery are kept turned on only if necessary, avoiding any unnecessary emission.</li> <li>Machines and equipment are periodically checked and maintained to ensure their good working condition.</li> <li>All equipment and machines must be maintained and tested for compliance with standards and technical regulations for the protection of the environment and have appropriate certifications.</li> <li>Activities are carried out using the minimum required number of means at the same time.</li> <li>Electric small-scale mechanization and technical tools are used when available and feasible.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
2	Noise	Construction activities are to take place within reasonable hours during the day and early evening.	Contractor	Resident engineer	Included in contractor cost
		<ul style="list-style-type: none"> <li>Equipment must be kept in good working order and where appropriate fitted with silencers which are kept in good working order.</li> <li>Equipment to run only when necessary</li> <li>Positioning of the noise sources in a concealed area with respect to acoustic receptors, consistent with the needs of the construction site.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
		Use of personal protection equipment for workers especially those who use jack hammers or near noisy engines or compressors.	Contractor	Resident engineer	1000

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
3	Water resources	Wastewater from the worker rest areas or construction offices should be contained in sealed containers and should be removed regularly from site by means of authorized contractors.	Contractor	Resident engineer	1000
		<ul style="list-style-type: none"> <li>In case of using septic tanks on site, the engineering drawings of these tanks should be presented to the Resident Engineer for approval. The wastewater in these tanks should be collected and then transported periodically to the nearest authorized wastewater treatment plant.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
4	Soil	<ul style="list-style-type: none"> <li>To prevent soil contamination by oil/grease spills, leakages or releases, all manipulations of oil derivatives in the process of construction and provision of the fuel to the machines should be performed with maximum care; leak proof containers should be used for storage and transportation of oil/grease and wash off from the oil/grease handling area shall be drained through drains and collected and disposed properly</li> <li>Construction waste and debris shall be collected on a regular basis and disposed of at designated landfills;</li> <li>Only authorized quarries shall be used for purchasing soil to be used for embankment, padding, bedding, backfilling during construction; and</li> <li>It must be prohibited to operate equipment and vehicles outside the designated work areas and roads.</li> <li>Reuse the excavated soil when it deemed technically appropriate.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
		<ul style="list-style-type: none"> <li>No hazardous waste storage to take place directly on soils. Appropriate and enclosed containers away from direct sunlight, wind and rain.</li> <li>Provide adequate ventilation where volatile wastes are stored.</li> <li>Limiting access to hazardous waste storage areas to employees who have received proper training</li> </ul>	Contractor	Resident engineer	1000
5	Solid and hazardous wastes	<ul style="list-style-type: none"> <li>Minimizing hazardous waste generation by implementing stringent waste segregation to prevent the commingling of non-hazardous and hazardous waste to be managed.</li> <li>Provision of readily available information on chemical compatibility to</li> </ul>	Contractor	Resident engineer in coordination with the local authority and	1000

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
		<p>employees, including labeling each container to identify its contents</p> <ul style="list-style-type: none"> <li>• Simple waste management plan for specific waste streams must be developed.</li> <li>• Non- hazardous or municipal waste must be collected and transported to local council approved disposal sites.</li> <li>• Food wastes must be collected, where practicable, considering health and hygiene issues, for disposal off-site through licensed contractors.</li> <li>• Waste containers must be located at each worksite.</li> <li>• Chemical wastes must be collected in 200 liter drums (or similar sealed container), appropriately labeled, for safe transport to an approved chemical waste depot or collection by a liquid waste treatment service.</li> <li>• Storage, transport and handling of all chemicals must be conducted in accordance with all legislative requirements, through licensed contractors and in coordination with the local authority.</li> <li>• All hazardous wastes must be appropriately stored in bounded areas and should be clearly identified as “hazardous”.</li> <li>• Transportation and disposal of hazardous wastes should be done through licensed contractors and in close coordination with the relevant local authority and in compliance with the legal requirements and instructions of the ministry of science and technology previously.</li> <li>• Hazardous liquids, such as solvents, rust proofing agents and primer must be managed in accordance with the requirements of relevant legislation and industry standards.</li> <li>• Material Safety Data Sheets (MSDS) for hazardous materials must be available on-site during construction and made available and explained to workers.</li> <li>• Hydrocarbon wastes, including lube oils, must be collected for safe transport off-site for reuse, recycling, transport or disposal at approved locations.</li> </ul>		ministry of science and technology regarding hazardous wastes	
6	Flora & Fauna	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
7	Topography and landforms	Not Applicable	Not Applicable	Not Applicable	Not Applicable
8	Traffic	<ul style="list-style-type: none"> <li>Where practicable, truck deliveries must be restricted to daytime working hours.</li> <li>Clear traffic signs and signs signals must be installed on-site to provide for safe traffic.</li> <li>Traffic management system and staff training, especially for the area near the culvert.</li> </ul>	Contractor in coordination with the Local Traffic Department	Resident Engineer	500
9	Health and Safety	<ul style="list-style-type: none"> <li>Limit speed of construction vehicles and provide road signage for drivers and local community.</li> </ul>	Contractor	Local traffic department in coordination with the RE	500
		<ul style="list-style-type: none"> <li>Having a clear set of OHS Plan and Procedures.</li> <li>Following the guidelines to minimize the risks of COVID19 transmission in civil works.</li> <li>Having a detailed emergency plan including the nearest medical center and the location of the first aid kits.</li> <li>Qualified personnel must be employed for the construction equipment, and personnel must be trained for health and safety issues.</li> <li>Personal protection equipment such as eyeglasses, gloves, hard heads and safety belts must be supplied and continuously used by all workers, technicians, engineers and site visitors.</li> </ul>	Contractor	Resident engineer	1000
		<ul style="list-style-type: none"> <li>Testing structures for integrity prior to undertaking work;</li> <li>Implementation of a fall protection program that includes training in climbing techniques and use of fall protection measures;</li> <li>An approved tool bag should be used for raising or lowering tools or materials to workers on structures;</li> <li>Use of helmets and other protective devices will mitigate against scratches, bruises, punctures, lacerations and head injuries due to dropping objects.</li> <li>Adherence to local and international guidance and codes of practice on EHS management during construction;</li> <li>management, supervision, monitoring and record-keeping;</li> <li>implementation of EHS procedures as a condition of contract with contractors</li> </ul>	Contractor	Resident engineer	Included in contractor cost

Receptor	Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
	<ul style="list-style-type: none"> <li>and their sub-contractors;</li> <li>• clear definition of the EHS roles and responsibilities of the companies involved in construction and to individual staff (including the nomination of EHS supervisors during construction and an EHS coordinator during operation);</li> <li>• pre-construction assessment of the EHS risks and hazards associated with construction and operation, including consideration of local cultural attitudes, education level of workforce and local work practices;</li> <li>• provision of appropriate training on EHS issues for all construction and operation workers, including initial induction and regular refresher training, taking into account local cultural issues;</li> <li>• provision of health and safety information;</li> <li>• regular inspection, review and recording of EHS performance;</li> <li>• Protective systems to be put in place to protect workers from cave-in in trenches.</li> </ul>			
	<ul style="list-style-type: none"> <li>• Any accidents to be reported and treated within site as a first aid procedure.</li> <li>• Safety training for the workers.</li> <li>• Fuel and oil changing shelters should be equipped with necessary firefighting and safety equipment</li> <li>• First aid boxes should be available all times onsite and trained staff on emergency aids should be identified.</li> </ul>	Contractor	RE in coordination with health and safety officials.	1000
	<ul style="list-style-type: none"> <li>• Provide surveillance and active screening, and immunization</li> <li>• Provide treatment on-site or in community health care facilities</li> <li>• Eliminate unusable impounded water, and apply vector control programs</li> <li>• Erect suitable and adequate warning signage along culvert cleaning and excavation sites</li> <li>• Collaborate with local communities and responsible authorities to improve signage and visibility</li> <li>• Avoid uncovered piles of aggregates and other construction materials</li> <li>• Avoid burning waste in worksites <ul style="list-style-type: none"> <li>• Avoid or minimize driving through community areas and dangerous routes during daytime</li> <li>• Alert drivers on local speed limits, and monitor implementation</li> <li>• Minimize traffic by purchasing from the local markets to the extent</li> </ul> </li> </ul>	Contractor	Resident engineer in coordination with health and safety officials.	1000

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
		<p>possible</p> <ul style="list-style-type: none"> <li>• Closing of trenches on the same day,</li> <li>• If a trench will be left open for the day after, barriers to prevent community members and unauthorized personnel will be put in place.</li> <li>• Assign local security personnel to prevent unauthorized entry to the site.</li> <li>• Signs and awareness should be installed close to the excavation area to protect road users and community.</li> <li>• Contractor prepares and implements Traffic Management Plan and Pedestrian Safety Plan</li> </ul>			
10	<b>Handling Complaints</b>	<ul style="list-style-type: none"> <li>• A complaints register will be kept on site and this will feed into the GRM. Details of complaints received will be incorporated into the audits as part of the monitoring process.</li> </ul>	Resident Engineer	PMO	Included in contractor cost
11	<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>▪ In case of accidental discovery stop all works and contact the responsible authority within 24 hours;</li> <li>▪ Provide training to the construction crew on the mode of conduct in case of accidental findings</li> </ul> <p>Chance find procedures will be used as follows: Stop the construction activities in the area of the chance find;</p> <ul style="list-style-type: none"> <li>• Delineate the discovered site or area;</li> <li>• Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the Ministry of Culture take over;</li> <li>• Notify the supervisory Engineer who in turn will notify the responsible local authorities and the Ministry of Culture immediately (within 24 hours or less);</li> <li>• Responsible local authorities and the Ministry of Culture would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists from the Department of Antiquities and the Ministry of Culture (within 72 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;</li> <li>• Decisions on how to handle the finding shall be taken by the responsible authorities from DA and the Ministry of Culture. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance)</li> </ul>	Contractor	Resident engineer in coordination with Heritage Authority.	Included in contractor cost

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
		<p>conservation, preservation, restoration and salvage;</p> <ul style="list-style-type: none"> <li>• Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Ministry of Culture; and</li> <li>• Construction work could resume only after permission is given from the responsible local authorities and the Ministry of Culture concerning safeguard of the heritage</li> </ul>			
12	<b>Child labor and Gender Based Violence</b>	<ul style="list-style-type: none"> <li>• Rigid obligations and penalties will be added to the contractor contracts in order to warrantee no child labor exist in the subproject</li> <li>• The PMO will oblige the contractor to keep a copy of IDs of laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old).</li> <li>• Labor influx should also be managed by contractor and ensure Code of Conduct is introduced and applied to avoid impact on local community and provide mitigation measure for GBV risks</li> <li>• The contractor also will be obliged to maintain daily attendance sheets in order to verify the attendance of workers in case of accidents and provide the injured persons with proper health insurance <ul style="list-style-type: none"> <li>▪ The code of conduct for workers/contractors should be introduced to prevent misconducts, including prevention of sexual harassment and gender based violence and also training and awareness rising for workers should be continued, through daily toolbox talks and other training opportunities.</li> </ul> </li> </ul>	Contractor	Resident engineer	Included in contractor cost
<b>Total cost US\$ (Construction phase)</b>					<b>9,000</b>



**Table 4: Mitigation Measures during Operation Phase.**

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
1	Air quality	<ul style="list-style-type: none"> <li>The net impact of the Project on air quality is not applicable, and will be limited to Construction Period.</li> </ul>	Not Applicable	Not Applicable	Not Applicable
2	Noise	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>	Not Applicable	Not Applicable	Not Applicable
3	Water resources	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>	Not applicable	Not applicable	Not applicable
4	Soil	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>	Not applicable	Not applicable	Not applicable
5	Solid and hazardous wastes	<ul style="list-style-type: none"> <li>Simple waste management plan for the waste resulted from the intake and along the channel must be developed.</li> </ul>	Local authorities	Local authorities	No cost
6	Flora & Fauna	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>	Not Applicable	Not Applicable	Not Applicable
7	Topography and landforms	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>	Not Applicable	Not Applicable	Not Applicable
8	Handling Complains	<ul style="list-style-type: none"> <li>The continued operation of a GRM for one year following operating of the network for use will ensure that local community members have an accessible, fair and transparent means of reporting any emerging adverse impacts, and a means of obtaining mitigation.</li> </ul>	Local authorities	Local authorities	No cost
9	Health and Safety	<ul style="list-style-type: none"> <li>Having a clear set of OHS Plan and Procedures.</li> <li>Provision of health and safety information;</li> <li>Regular inspection, review and recording of EHS performance;</li> <li>Following the guidelines to minimize the risks of COVID19 transmission in civil works.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
<b>Total cost US\$ (Operation phase)</b>					<b>No Cost</b>

## **6. ENVIRONMENTAL AND SOCIAL MONITORING PLAN**

### **7.1 Environmental and Social Monitoring**

In order to ensure full compliance of the performed activities to the environmental and social requirements, regular monitoring should be performed. For this purpose, an environmental and social monitoring program has been established for the construction phase to ensure the proper implementation of the environmental and social mitigation measures.

### **7.2 ESMP Institutional Arrangements**

In order to ensure full compliance with the environmental and social requirements which are described above, PMO nominated a qualified engineer to act as the focal point for environmental and social affairs at the central level. On the field level, PMO nominated two engineers in Duhok to act as environmental and social officers. Those engineers will be trained on monitoring and reporting of environmental and social impacts and how to fill the checklist to be used during field visits before implementation starts.

The Resident Engineer will be the officially responsible staff member for ensuring environmental and social compliance. S/He will be assisted by the designated environmental and social field officers.

In addition, a qualified consultant is recruited by the PMO to provide technical assistance and capacity building to the environmental and social team both at the central level and at the field level.

### **7.3 Reporting requirements**

In order to ensure that the mitigation and monitoring measures are being carried out effectively with the required frequency, a clearly defined and regular reporting and response system must be established. The needed frequency of report generation for inspection is to be monthly, and for auditing twice a year, environmental monitoring is once per year.

The information will be made available to the relevant regulatory authorities as required. In addition to the monitoring and reporting requirements documented in the relevant sections of the ESMP, the following reporting regime will be implemented:

- a) All incidents or accidents during the rehabilitation should be reported immediately to relevant authorities.
- b) All corrective measures must be discussed to ensure compliance with laws and regulations.
- c) Reports for personnel training on environmental issues or emergency practices must be produced.
- d) Progress reports, environmental monitoring report and other inspections reports must be produced periodically.

The PMO environmental and social field officers will provide the Resident Engineer with a weekly report briefing their observations and recommendations for action. Whereas the Resident Engineer shall prepare an environmental and social management report on monthly basis to PMO in Baghdad.

**Table 5: Monitoring Activities during Construction Phase.**

Receptor		Monitoring Activities	Monitoring Indicators	Frequency	Responsibility	Supervision	Total estimated Cost in US\$
1	Air quality	<ul style="list-style-type: none"> <li>Investigate dust complaints from workers and residents</li> <li>Visual inspection of vehicles and equipment operating or entering the site and Measurements of exhaust emissions (CO, SO<sub>x</sub>, NO<sub>x</sub>, PM10, PM2.5)</li> </ul>	<ul style="list-style-type: none"> <li>Recorded and documented complaints</li> <li>Record the status of equipment and vehicles on site (excessive black or white smoke)</li> </ul>	<ul style="list-style-type: none"> <li>Daily visual inspection</li> <li>Once every six month</li> </ul>	Resident Engineer	PMO	1,000
2	Noise	Investigate noise complaints from workers and neighboring communities in the affected locations	<ul style="list-style-type: none"> <li>Recorded and documented complaints</li> <li>Recorded tests results</li> </ul>	<ul style="list-style-type: none"> <li>Weekly inspection of complaints</li> <li>Only in case of complains</li> </ul>	Resident Engineer	PMO	1,000
3	Water resources	<ul style="list-style-type: none"> <li>Investigate wastewater disposal measures</li> </ul>	Site Investigation report	Daily Investigation	Resident Engineer	PMO	No cost
4	Soil	<ul style="list-style-type: none"> <li>Observe any soil contamination with oil or fuel</li> <li>Observe any accumulation of wastes</li> </ul>	Site Investigation report	Monthly	Resident Engineer	PMO	No cost
5	Solid and hazardous wastes	<ul style="list-style-type: none"> <li>Maintain records on waste types and quantities</li> <li>Observe any waste accumulation in un approved locations</li> </ul>	<ul style="list-style-type: none"> <li>Waste management contracts with authorized contractors</li> <li>Waste delivery receipts from local authorities.</li> </ul>	<ul style="list-style-type: none"> <li>Weekly</li> <li>Weekly</li> </ul>	Resident Engineer	PMO	No cost
6	Health and safety	<ul style="list-style-type: none"> <li>Ensure compliance of workers to Health and Safety requirements</li> <li>Maintain log on incidents and accidents</li> </ul>	Observation report Accidents report	Weekly	Resident Engineer	PMO	No cost

Receptor		Monitoring Activities	Monitoring Indicators	Frequency	Responsibility	Supervision	Total estimated Cost in US\$
7	Flora & Fauna	Record any observation about wild animals or plants on site or nearby and report to the Environmental Authority	Observation report	Upon occurrence	Resident Engineer	PMO	No cost
8	Topography and landforms	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
9	Traffic	Ensure speed limits and warning signs are installed	Road signs are installed.	Monthly	Resident Engineer	PMO	No cost
10	Handling Complaints	Ensure that the GRM is effective and well communicated	Number of complaints received, analyzed and responded to.	Weekly	Resident Engineer	PMO	No cost
11	Child labor and Gender Based Violence	<ul style="list-style-type: none"> <li>• Ensuring that children and minors are not employed directly or indirectly on the project.</li> <li>• Ensure to prevent misconducts, including prevention of sexual harassment and gender based violence.</li> </ul>	<ul style="list-style-type: none"> <li>• A copy of IDs of laborers and labor registry.</li> <li>• Percentage of workers that have attended the code of conduct training and number of GBV training delivered.</li> </ul>	<ul style="list-style-type: none"> <li>• Daily</li> <li>• Weekly</li> </ul>	Resident Engineer	PMO	No cost
<b>Total cost US\$ (Operation/Maintenance phase)</b>							<b>2,000</b>

The environmental and social consultant will prepare a monthly environmental and social supervision report after conducting site supervision visits.

On quarterly basis, PMO shall prepare an environmental and social progress report which will be submitted to the international financial institution (WB) for review and disclosure.

#### 7.4 Capacity Development and Resources Requirements

PMO dedicated sufficient human resources to undertake the environmental and social management requirements as explained above. The assigned staff at the central and field levels are competent in the field of engineering and have variable practical experience. For the staff who will be responsible for undertaking the environmental and social tasks, they will require some capacity development.

All construction personnel and contractors are required to undertake appropriate environmental training and induction programs including, importantly, on GRM procedures.

All managers and supervisors will be responsible for ensuring that personnel under their control have the requisite competencies, skill and training to carry out their assigned tasks in accordance with the requirements of the ESMP. They will also be responsible for identifying additional training and competency requirements.

All project supervisors and managers will receive additional detailed training on the use and implementation of the ESMP. The following Table presents the proposed institutional strengthening program and capacity development requirements.

**Table 6: Capacity Development Requirements**

Capacity development topic		Provider(s)	Duration	Estimated Cost (US\$)
1	Environmental Impact Assessment Environmental and social Management in Construction Sites	Consultant	3 Days	1,500
2	Iraqi Environmental Legal Requirements	Ministry of Environment	1 Day	500
3	World Bank Environmental and Social Safeguards	Consultant	2 Days	1,000
<b>Total Estimated Cost</b>				<b>\$3,000</b>

In order to ensure full compliance of the environmental and social requirements, regular site visits should be conducted. Dedicated office spaces, office equipment and supplies in addition to adequate means of transportation should be made available for the environmental and social management team at the central level and most importantly on the field level. MOP PMO should ensure the allocation of sufficient budget resources to ensure availing the required resources to achieve the required tasks.

## **7. PUBLIC CONSULTATION**

### **8.1 Consultation Process:**

The public consultations were carried out in the village for the rehabilitation of irrigation system on 11 and 12 of November, 2019. The public consultations included only men and number of participants was 14 in the village. Accordingly, a questionnaire was formatted to cover the key environmental and social aspects related to the subproject. The consultation started by providing briefs about the subproject activities, potential impacts and future benefits.

In addition to public consultation, one on one interviews were conducted on 11 and 12 of November, 2019. The formatted questionnaire was then addressed to 5 women and 9 men in the surrounding community randomly to have their opinions and thoughts regarding the construction activities.

### **8.2 Consultation Results:**

All participants in these villages expressed that; the upgrade of this irrigation scheme will have a positive impact on their social daily life. Please refer to Annex 2 and Annex 3 for sample of public consultations in Burji village and also sample of individual interviews for both men and women. The full list of participants for public consultations and individual interviews are attached in standalone document to reduce the size of the instrument. As per the questionnaire prepared for individual and public interviews, the below are the main findings:

- 1) All interviewed locals agreed that the rehabilitation activities of irrigation system will serve all the people in the village and have a strong positive impact from the social perspectives on the locals.
- 2) The interests of the locals will not be affected in any way by the rehabilitation activities.
- 3) They asked to install a hot line to express their suggestion or concern that might happen during the rehabilitation phase.
- 4) No claims from any locals were recorded or alleged regarding the ownership of the land where irrigation channel will be constructed.
- 5) The rehabilitation of the project will enhance the social relationship among the locals; improve their communication and enhance their health situation via saving the efforts to irrigate the farms.
- 6) No vegetation covers, crops, plants, trees...etc. will be removed in order to execute the rehabilitation activities of the irrigation system.
- 7) There is no infrastructure that will be affected negatively due to the rehabilitation activities and there is no need for alternative roads.
- 8) No deportation, dislocation of any of the local community will be needed due to these activities.
- 9) The rehabilitation of the project will enhance the economic and social situation of the people via irrigating the farms.

## 8. GRIEVANCE REDRESS MECHANISM

The SFD started procurement process with one of the information technology companies in the process of establishing a free hotline. The company will submit initial report describe the (MIS, Website and the GRM system) next week. SFD is planning to set up a digital system with multi-channels for receiving complaints, inquiries, feedbacks or comments like WhatsApp, Facebook, email and complain boxes for each subproject. Additionally, focal points will be assigned at local level and central level to be in charge of handling complaints.

Meanwhile, in order to comply with the WB requirements, SFD has temporarily assigned three staffs as focal points with their cell phone numbers to be disseminated at each subproject level for receiving calls and handling complaints. The contact details will be posted at subproject signboard and the complaint boxes will be installed in each location as shown in the below table.

**Table 7: Contact Information for GRM**

#	Name	Job Title	Phone Number	E-mail
1	Hezar Rashad Muhammed	IT Engineer	07504745787	<a href="mailto:hezar_de@yahoo.com">hezar_de@yahoo.com</a>
2	Dilshad Khalid Muheey	Engineer	07504799313	<a href="mailto:hezar_de@yahoo.com">hezar_de@yahoo.com</a>
3	Aseel Hazim Hirmiz	Engineer	07504461160	<a href="mailto:hezar_de@yahoo.com">hezar_de@yahoo.com</a>

The process of managing complaints will be as follows:

- 1- Complaints should be sorted out according to complexity;
- 2- Simple inquiries should be resolved on the spot by concerned staff members in 3-6 working days as a maximum and should be documented and archived as per the relevant procedure;
- 3- Complex issues should be investigated and communicated with higher management for final decisions within a timeframe of 20 working days as a maximum;
- 4- After the completion of the proceedings, the complaint is closed, and information is included in the system, including the action(s) taken and the result(s) required;
- 5- The complainant shall be notified of the result and the action immediately and informed of the possibility of objecting to the procedure. Individuals who submit their comments or grievances have the right to request that their name be kept confidential. An anonymous complaint will receive a code and should be investigated appropriately and treated courteously.

In addition to PMO, the MOP, project offices in governorates, and Community Development Groups (CDGs), the World Bank's Grievance Redress System (GRS) can also be approached for reporting and resolving issues.

## ANNEXES

### Annex 1: Public Consultations Photos



Public Consultations at the village



## Annex (2): Public Consultation at this Village

### تقرير فريق الإجراءات البيئية والاجتماعية

محافظة دهوك / ديرلوك / قرى (برجي، كوهزى، بلافا، سركلى)

#### مشروع (تطمين ساقية قرية برجي)

وصف المشروع : يتضمن المشروع إنشاء ساقية بطول ٢٣٨٩ م وتشمل الاعمال حفريات وصب اسس الساقية بمساحة ٢٩٢م<sup>٢</sup> مع صب جدران الساقية وإنشاء حوض ماء كونكريتي يبعد ٢٠١٢×٢٠١٤ م .

#### محضر اجتماع المشروع

١. إن المشروع سيساهم في تحسين الواقع الاجتماعي والاقتصادي للقرية من خلال توفير المياه اللازمة لسقي المحاصيل الزراعية وبالتالي تقليل الأعباء الاقتصادية عن كاهل سكان القرية وانعاش واقعها الاقتصادي .
٢. بين رئيس اللجنة المجتمعية حضور ممثلي اللجنة أثناء عملية الكشف الموقعي وإن المشروع هو اولوية بالنسبة للقرية و اكدت اللجنة عدم وجود تعارضات للمشروع المذكور انفاً كونه سيؤهل طرق موجودة حالياً على ارض خالية من اي بنى تحتية قد يسبب المشروع اي ضرر لها .
٣. إن المشروع يخدم جميع سكان القرية دون استثناء .
٤. المشروع لا يحتاج الى انشاء طرق بديلة حيث إنه لا يؤدي الى غلق أي طرق داخل القرية .
٥. لا يؤثر المشروع على البيئة الحيوية المحيطة به والحياة البرية ولا يؤدي الى قطع الاشجار ورغم ذلك نؤكد على ضرورة الالتزام بجميع الاجراءات الوقائية البيئية أثناء تنفيذ المشروع .
٦. طالبت اللجنة المجتمعية للقرية بوجود خط ساخن للمشروع مع الادارة التنفيذية للصندوق في حال حصول اي عارض.
٧. المشروع لا يؤثر على الحياة الاقتصادية للمنطقة حيث لا توجد بالقرب من المشروع اي اعمال تجارية ستتوقف بل العكس تماماً حيث ان توفير الطرق الملائمة سيؤدي الى انعاش الوضع الاقتصادي لسكان القرية .
٨. لا يوجد تعارضات أو تجاوزات على أرض المشروع وكذلك إن المشروع لا يحتاج الى استملاكات أو تعويضات.
٩. وجهت اللجنة المجتمعية شكرها للقائمين على المشروع لما له من اهمية كبرى في تسهيل حياة المواطنين اليومية .
١٠. ليس للمشروع اي اثار اجتماعية سلبية بل العكس فان المشروع سيؤدي الى زيادة التواصل بين اهالي القرية مما يؤدي الى زيادة التماسك و الترابط العائلي من خلال تقليل الاعباء اليومية الناتجة عن عدم توفر المياه الصالحة لسقي المزروعات.
١١. اكدت اللجنة المجتمعية على دعمها الكامل للمشروع وتقديم اي مساعدة ممكنة للقائمين على المشروع أثناء تنفيذه .

١٢. اكدت اللجنة المجتمعية ان المشروع لا يؤدي الى اعادة توطين اشخاص او الاضرار باي مواطن بل العكس .
١٣. المشروع سيساهم في زيادة الوعي الثقافي والعلمي لسكان القرية من خلال بيئة ملائمة لمزاولة الحياة اليومية.
١٤. المشروع سيساهم في تعزيز الجانب الصحي ايضاً و ذلك من خلال توفير البيئة الملائمة للزراعة وتقليل المجهود العضلي للفلاحين .
١٥. تم مناقشة اهالي القرية بجميع تفاصيل العمل بالمشروع و الإجابة عن كافة أسألتهم واستفساراتهم إضافة الى الاستعلام منهم عن المشاكل التي تعاني منها القرية وبين الأهالي أن المشروع سيساعد على إيجاد الحل الناجح لإحدى أهم مشاكل القرية .
١٦. أبدت حكومة دهوك عدم ممانعتها من تنفيذ المشروع و كذلك أعضاء مجلس القرية لكون المشروع ذو أهمية كبيرة في تحسين الواقع الخدمي للقرى المستهدفة .
١٧. نرفق طياً صور لمنطقة المشروع واللجنة المجتمعية مطبوعة على (CD).
١٨. نرفق طياً استمارات الاستبيان للمشروع عدد (١٥).
١٩. مواقع GPS للمشروع في القرية

خط العرض	خط الطول
٣٧°٠٢٧.٨٩" N	٤٣°٣٤'٣٦.٨٩" E

Annex (3): Sample individual interviews for both men and women

**(الشيخ)**

اسم المشروع: **تطوير ساحل قرية جرجي / دبرالوث**  
 الاسم: **سيد محمد الاله**  
 الجنس:  ذكر  أنثى  
 المهنة: **طيار**

ت	السؤال	نعم	لا	الملاحظات
1	هل تعتقد ان عملية اصهار المشروع لها اثر ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2	هل هناك ادخالات او مخرجات من قبل السكان المحليين بعناية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3	سبب اصهار الاصحاح هل هناك صعوبات رفع لمخاض زراعية او تجار او اي عطاء باقي تعود علىته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اصهار الاصحاح؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5	هل هناك اي بني تحية دائمية او مؤقتة تلعب دورا اساسيا في التفاعلات الحيوية اليومية للسكان مستقر بعناية اصهار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6	هل ان اصهار اصهار المشروع ستنسب باجراءات اعادة توطين لشخص او لاشخاص في مناطق جيدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8	هل توقع وجود تفرقات اجتماعية سلبية بالمنطقة نتيجة اصهار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9	هل هناك تغير بيوغرافي او ضرر في النسيج الاجتماعي نتيجة صعوبات الاصهار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10	هل يحتاج المواطنين القريبون من المشروع لوضع علامات تحذيرية او استلايات لزيادة معدلات الامن؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع: **محمد الاله**  
 الاسم: **سيد محمد الاله**  
 التاريخ: **2019 / /**

**(الشيخة)**

اسم المشروع: **تطوير ساحل قرية جرجي / دبرالوث**  
 الاسم: **بيير رشيد**  
 الجنس:  ذكر  أنثى  
 المهنة: **معلم**

ت	السؤال	نعم	لا	الملاحظات
1	هل تعتقد ان عملية اصهار المشروع لها اثر ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2	هل هناك ادخالات او مخرجات من قبل السكان المحليين بعناية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3	سبب اصهار الاصحاح هل هناك صعوبات رفع لمخاض زراعية او تجار او اي عطاء باقي تعود علىته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اصهار الاصحاح؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5	هل هناك اي بني تحية دائمية او مؤقتة تلعب دورا اساسيا في التفاعلات الحيوية اليومية للسكان مستقر بعناية اصهار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6	هل ان اصهار اصهار المشروع ستنسب باجراءات اعادة توطين لشخص او لاشخاص في مناطق جيدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8	هل توقع وجود تفرقات اجتماعية سلبية بالمنطقة نتيجة اصهار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9	هل هناك تغير بيوغرافي او ضرر في النسيج الاجتماعي نتيجة صعوبات الاصهار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10	هل يحتاج المواطنين القريبون من المشروع لوضع علامات تحذيرية او استلايات لزيادة معدلات الامن؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع: **بيير رشيد**  
 الاسم: **بيير رشيد**  
 التاريخ: **2019 / /**