# **Republic of Iraq**

# **Environmental and Social Management Framework**

# Electricity Services Rehabilitation and Enhancement Project for the Benefit of the Southern Electricity Directorate

Final

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# LIST OF ACRONYMS AND ABBREVIATIONS

ARAP	Abbreviated Resettlement Action Plan
BSSF	Business Support Services Firm
CPF	Country Partnership Framework
ESIA	ESIA Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESREP	Electricity Services Rehabilitation and Enhancement Project
GBV	Gender Based Violence
GDP	Gross Domestic Product
GIS	Geographic Information System
GoI	Government of Iraq
GRM	Grievance Redress Mechanism

GRS	Grievance Redress Service
IBRD	International Bank of Reconstruction and Development
IDPs	Internally Displaced Persons
IFC	International Finance Corporation
INES	Iraq Integrated National Energy Strategy
KW	Kilowatt
KWh	Kilowatt hours
M&E	Monitoring and Evaluation
MENA	Middle East and North Africa
MoE	Ministry of Electricity
MVA	Megavolt Ampere
MW	Mega-Watt
OE	Owner's Engineer
OP/BP	Operational Procedure/Bank Policy
PAP	Project Affected People
PMT	Project Management Team
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SEDD	South Electricity Distribution Directorate
SETD	South Electricity Transmission Directorate
WB	World bank

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# **EXECUTIVE SUMMARY**

#### **E1. INTRODUCTION**

#### E1.1 Background and Objectives of the ESMF

Inefficiencies in the energy sector impose a significant fiscal and economic burden on Iraq. The energy sector has suffered from decades of international sanctions and conflict that have left institutions weakened and resulted in under-investment and chronic deterioration in infrastructure. Deficiencies present themselves at all stages, from generation capacity to distribution.

In order to improve the inefficient technical and commercial performance of the electricity sector, the Government of Iraq has initiated actions to restructure tariffs, and progressively move towards achievement of full cost-recovery, whilst ensuring sufficient protection for poor and vulnerable consumers. The policies are founded in the sector strategy, the Iraq Integrated Energy Strategy (INES), adopted by the Cabinet in 2014, and enshrined in the recently passed law, the Electricity Law No. (53) of 2017.

On this basis, IBRD resources are proposed to support the reconstruction and enhancement of the electricity services in the southern region of Iraq in the governorates of Basra, Al-Muthana, Dhi Qar, and Missan, whose economic infrastructure including electricity services were destroyed by various wars and conflicts during the period 1980-2008. In addition, the region is a major electricity load center. According to MoE 2015 data, the SEDD was the second largest electricity consumer, totaling about 31 percent of the total energy billed

This document presents an Environmental and Social Management Framework (ESMF) for the Electricity Services Reconstructions and Enhancement Project (ESREP) for the benefit of the South Electricity Directorate. The objective of this ESMF is to provide an environmental and social management process for the design and implementation of this Project and to provide a practical tool during project formulation, design, planning, implementation and monitoring to ensure that environmental and social aspects are duly considered in the process.

#### **E1.2 Project Location and Description**

The Project will be implemented in southern Iraq, covering the governorates of Basra, Al-Muthana, Dhi Qar, and Missan.

The ESREP project will consist of the following three (3) main components:

**Component 1. Transmission Network Reinforcement (US\$125.0 million).** This component is proposed to finance activities aimed at increasing the transmission network capacity to: (i) address network capacity limitations to meet existing electricity power demand; (ii) meet expected future load growth; (iii) provide operation flexibility and hence improved electricity supply reliability; and (iv) reduce transmission network technical losses. The proposed activities include: (i) 132/33/11KV substations rehabilitation and upgrades; (ii) 132KV transmission network reinforcement; and (iii) supply and installation of 132/33/11KV mobile substations. The proposed scope is expected to increase the transmission network capacity by about 1.60GW.

**Component 2. Distribution Network Reconstruction, Operational and Commercial Efficiency Enhancement (US\$ 110.0 million).** This component will support activities related to: (a) distribution network rehabilitation and reinforcement to meet both current and future electricity demand, reduce technical losses and increase operations flexibility including distribution substations and lines; and (b) Design, supply, install and commission of an Integrated Distribution Management Information System (IDMIS) covering electricity distribution core business functions namely; network operations and maintenance, commercial, and management of corporate resources. The IDMIS will include a Revenue Protection Program (RPP) to improve electricity sales revenue management, including a geo-referenced customer database, metering, billing and revenue collection.

**Component 3. Institutional Capacity Strengthening and Project Implementation-** (US\$ 15.0 million). This will include development of a regulatory framework and institutional capacity building aligned with the government reform program for improved accountability, governance, financial sustainability and increased private sector participation. The TA and advisory services will among others support the following:

- a. Sector Restructuring and Corporatization.
- b. Establishment of a Sector Modernization Unit within the MoE.
- c. Capacity Building and Institutional Strengthening.

### **E2. LEGAL AND INSTITUTIONAL FRAMEWORK**

#### **E2.1 World Bank Safeguard Requirements**

#### Safeguard policies triggered for this project

The ESREP project has been classified as a "**Category B**" project; meaning that the potential impacts of the project are less adverse & more limited, fewer, site-specific, likely reversible as compared with Category A projects, and mitigation measures can be more easily designed/implemented

The ESMF and subsequent ESIAs/ESMPs should comply with the safeguards policies and procedures of the World Bank (WB). The project will potentially trigger Environmental Assessment OP/BP 4.01 and Involuntary Resettlement OP/BP 4.12.

#### **E2.2** National Legislations and Regulations

The project is subject to the following Iraqi laws and regulations:

- Law No. 12 of 1981: Land Acquisition Law
- Regulation No. 2 of 2001: Preservation of Water Resources
- Law No. 55 of 2002: The Law of Antiquities and Heritage
- Law No. 37 of 2008: Establishing the Ministry of Environment
- Law No. 2 of 2009: Protection and improvement of the environment and natural resources
- Law No. 27 of 2009: Protection and Improvement of Environment
- Law No. 17 for the year 2010: Protection of Wild Animals and Birds
- Law No. 41 of 2015: Noise Protection and Control.
- Law No. 37 of 2015: Labor codes, general labor and employment acts
- Ministerial Instruction No. 3 of 2012: Environmental determinants for the establishment of projects and monitoring of their safe implementation
- Ministerial Instruction No.12 of 2016: Occupational Health and Safety Requirements Regulations

#### E3.1 Socio-economic Baseline

Private consumption and investment in Iraq remain subdued due to an unstable security and political situation, and a poor business environment. Poverty, as estimated by the Iraqi government reached 22.5 percent in 2014 nationwide, and in the ISIS-affected governorates, the direct impact of economic, social and security disruptions is estimated to have doubled poverty rates to 44 percent. In the South, where poverty rates have always been high, the macro level shocks have increased estimated poverty rates to above 30 percent. The humanitarian crisis in Iraq remains one of the world's largest and most unstable. In 2015, more than 650 000 people in areas affected by the conflict with the Islamic State of Iraq and the Levant (ISIL) have been displaced, including 135 500 who have fled fighting in Mosul since 17 October. In total, 3.03 million Iraqis are displaced and around 1.37 million have returned to retaken areas since January 2014. Agricultural production has declined by 40 percent since 2014, undermining the country's food self-sufficiency. Some 2.9 million people – 77 percent of whom are women, children or elderly – are food insecure, forced to rely on negative and often irreversible coping strategies. (FAO 2016)

Overall, Iraq has wide access to water and sanitation services because the government built large hydraulic infrastructure (dams and barrages), mainly in the 1980s. The poor have less access to improved water services than the non-poor, but the access gap between poor and non-poor is declining (World Bank 2017). Water from the general network is often only suitable for washing and cleaning purposes. Drinking water is generally purchased from water tankers or markets which receive supplies from petrochemical plants that use reverse osmosis to remove the excess salt.

Women with low levels of education and skills are often self-employed and concentrated in private sector activities. These are usually informal, low-paying jobs with almost no access to benefits such as health insurance, maternity leave, or pensions. Women working in the informal economy or private sector are generally excluded from the protections of the labor code as these do not apply to women "who are engaged in a family enterprise in which only family members work and which is under the authority and supervision of the woman's spouse, father, mother, or brother" (UNDP Iraq, 2012).

#### **E3.2 Environmental Baseline**

#### **Climate**

The south of Iraq is characterized with dry desert climate, with great temperature variations between day and night, summer and winter. In Basra, he high temperature reaches 50°C; the low is above frost, while in Al-Muthanna, Missan, and Dhi Qar, hight temperatures range between 42-45°C, and low temperatures range between 17-13 °C. Rainfall is restricted to the winter months in all four governorates, and ranges between 50–200 mm.

#### Natural Resources

- I. Water resources
  - In the Basra Province, the Tigris River extends from the boundaries of Maysan Province from the north, reaching its confluence with the Euphrates River in Al Qurnah District 47km (29 mi.) downstream. About 24 subsidiary rivers feed into the Tigris for a combined total length of approximately 69,500 km (43,185 mi.).
  - The length of the Shatt Al-Arab River from Al Qurnah City to where it flows into the Arabian Gulf/Persian Gulf is around 95 km (59 mi.).
  - Southern Iraq has both constant and seasonal water resources in the form of the Mesopotamian Marshes, such as the central Marshes, more notably the Al-Zikri, Hawr Umm Al-Binni, and Al Qurnah Marshes; Al Huweiza Marshes east of the Tigris, Al Hammar Marshes south of the Euphrates with a western extent to Nasiriyah. These areas lie west of Shatt Al-Arab and are on both sides of the Tigris River.
  - There is a significant resource of groundwater in the western part of the Basra governorate.

#### II. Minerals

- Oil is considered one of the most important minerals available for exploitation in southern Iraq.
- Other materials include materials used for construction, such as sand and lime, limestone, and clay.

#### III. Agriculture:

There is little arable land in southern Iraq, but date production represents the majority of the production of the agricultural sector. There are other products such as wheat, barely, rice, and some fruits and vegetables.

#### **Biodiversity**

The combination of rain shortage and extreme heat makes much of Iraq a desert. Some areas, however, although arid, do have natural vegetation in contrast to the desert. The majority of sites important for biodiversity conservation have no protected area status, although many have been recommended for designation. Over 400 species of birds have been recorded in the northern Gulf Region (comprising Kuwait, Iraq, eastern Saudi Arabia and western Iran). The region is especially important as part of the intercontinental flyways used by huge numbers of birds moving between Africa and Eurasia. It has been estimated that some two to three billion migrant birds move south across Arabia each autumn.

The Mesopotamian marshlands are unique ecological features at the confluence of the Tigris and Euphrates. They fall into three distinct areas: Hawizeh Marsh in the north, fed by the Tigris and Karkheh rivers, the Central (Qurnah) Marsh, which lies between the Tigris and the Euphrates, and the Hammar Marsh to the south, traditionally fed by the Euphrates. The marshes are important economically and ecologically to all peoples of this area and are of global environmental significance.

#### E4. ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

#### E4.1 Environmental and Social Impact Identification

During the construction phase, the following project benefits are expected: income generation through the creation of temporary jobs; development of small businesses (food, clothing, etc.); and increased income through the procurement of local and imported materials sold on the domestic market.

After the project implementation, the following positive impacts are expected: improved quality of life through the possibility of using electrical appliances and lighting of homes; improved security,

due to public lighting; increased economic activities stemming from the development of businesses, mechanization and electrification of stores and workshops; access to information services (new technology, TV, etc.); and improved performance of administrative and social services as well as economic operators based in the project area (better working conditions, possibility of IT equipment, communication facilities).

The Table below entails safeguard issues and potential negative impacts that are associated with the project during the **construction phase**. All the impacts listed below are largely of low to moderate significance. The anticipated impacts are limited to the specific routes and sites, hence localized. They are reversible and time limited. Mitigation hierarchy has been applied in order to avoid and/or minimize the impacts. Residual impacts are highlighted where applicable.

En	ivironmental and Socia	I Impact Identification during Co	Instruction Phase
	Sub-Project	Project Activity/aspect	Impact
-	Overhead transmission lines	General Construction activities, including the use of heavy	Escalated concerns/complaints not managed properly
-	rehabilitation of substations	generators.	Improper Management of solid, liquid, and hazardous wastes including construction and
-	Distribution networks and their components Other related	Excavation activities, installation works and open storage of materials and excavated soils	demolition as well as household waste resulting in soil and surface water contamination.
	activities		Noise emissions
		Constructing permanent	Air and dust emissions
		substations	Water resources
		Utilization of subcontractors in construction activities	Environmental and public health risks by contamination with polychlorinated biphenyls (PCBs)
			Soil /groundwater contamination from accidental fuel/engine oil spill refueling
			Equipment on-site fueling
			Improper disposal of wastewater
			from site offices and/or worker
			water contamination.

	Risk of damage to roads and other
	infrastructure caused by transit of
	heavy trucks
	Risk of damage/breakage of
	underground utility lines and piping
	(drinking water, wastewater,
	electricity cables, telephone lines)
	Occupational health & safety in
	relation to but not limited to:
	Dhysical hazarda from
	- Flysical hazards from
	Discrimination waste
	- Physical hazards from
	equipment and vehicles
	- Fire Hazard
	- Slippage and Falling
	- Manual handling and lifting
	- Electrocution
	- Contact with live power
	lines
	Heat exhaustion
	Community health & safety in terms
	of car accidents or construction-
	related incidents
	Traffic congestion and blockage of
	access
	Potential impacts associated with
	chance finds
	Permanent /Temporary land
	requirements/acquisition
	Loss of Livelihood or assets and/or
	temporary loss of access to
	productive resources
	Poor Labor conditions
	Risk of child labor
	Increased risk of illicit behavior and
	crime
Labor Influx associated risks	Influx of Additional Population
and impacts	("Followers")
	Increased burden on public service
	provision
	Gender-based violence
	Local inflation of prices and
	crowding out of local consumers

	Social conflicts within and between communities
	Increased risk of spread of
	communicable diseases

During the **Operation phase**, the following impacts are expected:

#### I. High voltage overhead transmission lines:

- Electromagnetic Fields (EMF)
- Noise
- Aesthetics
- Bird collisions

#### **II.** Low voltage distribution network

It is planned that the low voltage distribution networks will be installed using posts and overhead wires. Routine maintenance of such networks may require cutting some trees or blocking access to some roads. The planned interventions will be mainly replacing damaged or stolen parts of the networks. Any new additions to the network will be in urban settings.

#### **III.** Substations

Many high-voltage circuit breakers, switches, and other pieces of equipment used in the transmission and distribution system are insulated with sulfur hexafluoride, which is a potent greenhouse gas (GHG). This gas can leak into the atmosphere from aging equipment or during maintenance and servicing.

#### E4.<sup>7</sup> Framework ESMP Implementation Arrangements

#### **Overall project implementation arrangements**

The project transmission component will be implemented by the South Electricity Transmission Directorate (SETD) whereas the SEDD shall be responsible for the implementation of the distribution component. The SEDD will transfer the transmission component project agreement implementation responsibilities to the SETD by signing a Project Implementation Agreement with the SETD. The SETD and SEDD shall be responsible for the project related procurement, safeguards, financial management, M&E, and project management functions. Each implementing entity has established a Project Management Team (PMT) that will be responsible for the overall project implementation as well as coordination and reporting to the Bank.

An Owner's Engineer (OE) will support overall project implementation, and capacity development as this is the first World Bank project implemented by either of the two entities and also noting that most of the international procurement of similar contracts has been the role of the Ministry of Electricity headquarters. As part of the SEDD institutional capacity building and strengthening, a Business Support Services Firm (BSSF) with experience in electricity utility management and operations, shall be hired to support the SEDD initial operations as a corporate entity, business re-engineering and preparation of the BMIP.

The PMT includes personnel responsible for coordination, procurement, planning, financial aspects, operation, technical, environmental and social. For each aspect, three dedicated personal have been proposed as focal points; One manager and two officers . The responsibility of day-to-day planning, implementation and supervision of environmental/social safeguards specific to sub-projects will be borne by the PMT.

It is envisaged that if additional capacity is required, the PMT may recruit external consultants who have sufficient expertise to support PMT' focal points. At the field level, it is expected that the PMT's environmental and social focal points will conduct regular field supervision to ensure compliance of contractors, their workers and practices, to the ESMPs. PMT will also require engineering and technical firms to recruit specialized staff in environment, social development and health and safety to conduct daily supervision on field activities and prepare noncompliance reports on which the PMT will investigate and take action accordingly.

#### **Contractors**

Implementation of the ESMPs will largely be the contractors' responsibility. The contractor should nominate a qualified environmental, health and safety consultant and a social development consultant (recommended), to ensure compliance with the ESMPs during construction.

#### **Environmental Monitoring**

The ESREP will focus on effective environmental monitoring. As majority of the anticipated environmental impacts from the project are general in nature and related to construction and civil works, site management, worker/public safety etc., monitoring will be largely carried out in the form of compliance monitoring through regular site supervision by the responsible officers. A general monitoring checklist and a specific construction safety monitoring checklist to be used and filled during site supervision is provided in the ESMP framework. These lists should be updated and expanded to include impacts which are mostly case-specific and other site-specific environmental impacts based on actions agreed in the ESMPs.

Monitoring of environmental parameters (such as air, water, salinity, sediment quality, etc.) will be conducted based on the requirements specified in the individual ESMPs. The overall project impacts will be monitored during project implementation through a number of selected indicators, which reflect the positive environmental contribution from the project to the overall environment. The project should support independent environmental audits on an annual basis throughout project implementation.

#### E4.3 Sub-project Environmental and Social Screening and Approval Framework

A framework methodology is proposed for the screening, categorization, review, approval, safeguarding, and monitoring of sub-projects. Sub-projects are screened for potential ES impacts using the screening checklists included as **Annex 2**. The objective of the screening will be to determine the appropriate type of safeguard instruments among the following:

The Bank will then review the screening results and accordingly the safeguards relevant instruments shall be confirmed, prepared, consulted with stakeholders and disclosed. Following clearance of the safeguards instruments by the Bank and/or government, the ESMPs shall be implemented, supervised and monitored. An assessment of potential sub-projects and identification of suitable safeguard instruments

Sub-project	Selected Safeguard	Justification
	Instrument	
Installing new	Checklist ESMPs	Intervention limited to installing one or
transformers and mobile		more transformers with minimal

	-	
stations at existing stations		environmental and social impacts. Land already existing
Rehabilitation and wiring of the lines	Full-specific ESIAs	Impacts will depend on the route and surrounding sensitive receptors and a full-fledged ESIA has to be prepared.
Rehabilitation of the sub-stations	Site-specific ESMPs	Projects with medium significance impacts. Impacts will depend on the size of rehabilitation and surrounding sensitive receptors
Construction & Civil works	Site-specific ESMPs	Projects with medium significance impacts. Impacts will depend on the size of rehabilitation and surrounding sensitive receptors
		sensur e receptors

### **E4.4** Capacity building and training needs

Upon ESMF approval by the WB and adoption, it is recommended that the following stakeholders undergo training on ESMF application:

- Environmental/Safeguards Focal Points of the PMT
- Relevant staff of the Basra, Al-Muthana, Dhi Qar, and Missan governorates, Ministry of Electricity officials and the staff of both the South Electricity Transmission Directorate (SETD) and the South Electricity Distribution Directorate (SEDD).
- Relevant staff of the Owner's Engineer and Business Support Services Firm
- NGOs which could be associated with the implementation and monitoring of the ESMPs.
- Other project stakeholders interested/potential ESREP partners

ESMF Training will be customized to the roles of the various stakeholders to include:

- Sub-project screening, categorization, ES instrument preparation, and disclosure
- Overview of the ESMF structure, including positive list of subprojects
- Mitigation measures implementation
- Monitoring measures implementation
- Templates, archiving and reporting
- Project data analysis and project improvements

In addition, worker training is needed to minimize incident risk and ensure compliance with ESMF/ESMP provisions on the following:

- Customized Occupational Health and Safety
- First aid & Emergency response
- Training on sub-project ESMP preparation and implementation

# **CHAPTER ONE: INTRODUCTION**

#### **1.1 Background**

Reestablishing stability and security are key priorities of the government of Iraq. The Strategic Priorities in Ministries: 2014-18 Action Plan lays out these six priorities: (1) a secure and stable Iraq, (2) upgrading services to and the standard of living of citizens, (3) encouraging a shift towards the private sector, (4) increasing oil and gas production to improve the financial sustainability, (5) administrative and financial reform of government institutions; and (6) improving federal-local relations. Despite the rise of ISIS and the loss of control over land to the north and west of Baghdad in 2014, the dominant commercial areas of Iraq, from Baghdad through to Basra in the south have remained relatively secure. These areas present several challenges for the government, including the challenge of providing and improving basic services, and addressing unemployment and poverty, at a time of significant fiscal pressure due to the drop in the price of oil. In August 2015 and early 2016 mass demonstrations against corruption and weak public service started and entered the Parliament inside the International Zone in Baghdad. These tenacious challenges emphasize the importance of delivering significant reforms and social services.

Inefficiencies in the energy sector impose a significant fiscal and economic burden on Iraq. The energy sector has suffered from decades of international sanctions and conflict that have left institutions weakened and resulted in under-investment and chronic deterioration in infrastructure. Deficiencies present themselves at all stages, from generation capacity to distribution. Low operational efficiency, high levels of electricity losses, and obsolete network equipment have led to average levels of aggregate technical and commercial losses of around 40 percent of total electricity generated. As a result, nearly half of the energy transferred to the distribution network after being generated is lost before any revenue can be collected. The electricity grid is able to only provide

about 7.6 hours of electricity per day, thus forcing citizens to rely on expensive and polluting diesel generators for power.

Although conditions have improved in recent years for some firms, according to the Enterprise Survey in 2011, 54 percent of firms ranked access to and the reliability of electricity as the biggest obstacle to doing business. Peak summer demand has typically exceeded actual generation by almost 50 percent, and Iraq's Integrated National Energy Strategy estimated the cost of power outages at US\$40 billion per year (Booz and Co, 2013).

In order to improve the inefficient technical and commercial performance of the electricity sector, the GoI has initiated actions to restructure tariffs, and progressively move towards achievement of full cost-recovery, whilst ensuring sufficient protection for poor and vulnerable consumers. The policies are founded in the sector strategy, the Iraq Integrated Energy Strategy (INES), adopted by the Cabinet in 2014, and enshrined in the recently passed law, the Electricity Law No. (53) of 2017.

On this basis, IBRD resources are proposed to support the reconstruction and enhancement of the electricity services in the governorates of Basra, Al-Muthana, Dhi Qar, and Missan by improving transmission and distribution infrastructure, and reducing technical loss of electricity within the transmission and distribution system.

#### **1.2 Objective of the ESMF**

This document presents an Environmental and Social Management Framework (ESMF) for the Electricity Services Reconstructions and Enhancement Project (ESREP) for the benefit of the Southern Electricity Directorate. The objective of this ESMF is to provide an environmental and social management process for the design and implementation of this Project and to provide a practical tool during project formulation, design, planning, implementation and monitoring to ensure that environmental and social aspects are duly considered in the process. It describes the steps involved in identifying and mitigating the potential environmental and social impacts of the Project and ensures that all relevant institutional capacity building and training needs are established for effective implementation of mitigation measures outlined in the ESMF. A mitigation hierarchy approach has been adopted during the development of this ESMF in order to: avoid risks and impacts

when possible; minimize or reduce risks and impacts to acceptable levels where avoidance was not possible; mitigate; and compensate for remaining significant residual impacts or offset them.

The ESMF proposes high-level principles, guidelines and procedures to screen, assess, approve, manage and monitor the mitigation measures of environmental and social impacts of the project activities/subprojects. The output of this ESMF is intended to ensure that the proposed project will be environmentally and socially sound and sustainable.

#### **1.3 Project Description**

The Project will support improving the reliability, efficiency and accountability of electricity supply in the governorates of Basra, Al-Muthana, Dhi Qar, and Missan by improving transmission and distribution infrastructure, and reducing technical loss of electricity within the transmission and distribution system. The project also finances an operational and commercial efficiency enhancement program that includes the design, supply, install and commission of an integrated distribution management information system (IDMIS). The IDMIS shall cover core electricity distribution utility business functions, namely; network operations and maintenance, commercial, and management of corporate resources. Lastly, the project will support the decentralized electricity services and operationalization of the electricity law with regard to the corporatization of the South Electricity Distribution Directorate.

The project will directly support increasing the efficiency and reliability of electricity supply within the project areas by strengthening the transmission and distribution system through the construction of several transmission and distribution substations and lines. The project is expected to increase the electricity supply reliability in the project areas by reducing the electricity supply interruptions and network technical losses by about 50 percent and 16 percent, respectively. The commercial efficiency enhancement program is expected to increase electricity revenues sales by about 30 percent, with increased billing from 40 percent to over 70 percent. The project will also support sector institutional reforms for improved electricity services delivery, operations improvement, transparency and accountability by supporting the initial business processes of the SEDD as a corporate entity, sector corporatization and the set-up of a Modernization Unit at the MoE to kick-start the sector regulation functions. The proposed operational improvements focused on the SEDD is aimed to be a transformative catalyst for reform in the provision of electricity services in Iraq. Improved electricity distribution operations will go a long way to addressing chronic distrust amongst electricity consumers and at the same time will begin to alleviate the burden on government resources by enhancing fiscal performance. The goal of the proposed approach is to help enhance the SEDD core business operations; to get the commercial foundation built and reinforced and to use that strength to then systematically tackle pandemic challenges related to the sector's fiscal sustainability.

#### **1.3.1 Project Components**

The ESREP project will consist of the following three (3) main components:

**Component 1. Transmission Network Reinforcement (US\$125.0 million).** This component is proposed to finance activities aimed at increasing the transmission network capacity to: (i) address network capacity limitations to meet existing electricity power demand; (ii) meet expected future load growth; (iii) provide operation flexibility and hence improved electricity supply reliability; and (iv) reduce transmission network technical losses. The proposed activities include: (i) 132/33/11KV substations rehabilitation and upgrades; (ii) 132KV transmission network reinforcement; and (iii) supply and installation of 132/33/11KV mobile substations. The proposed scope is expected to increase the transmission network capacity by about 1.60GW.

**Component 2. Distribution Network Reconstruction, Operational and Commercial Efficiency Enhancement (US\$ 110.0 million).** This component will support activities related to: (a) distribution network rehabilitation and reinforcement to meet both current and future electricity demand, reduce technical losses and increase operations flexibility including distribution substations and lines; and (b) Design, supply, install and commission of an Integrated Distribution Management Information System (IDMIS) covering electricity distribution core business functions namely; network operations and maintenance, commercial, and management of corporate resources. The IDMIS will include a Revenue Protection Program (RPP) to improve electricity sales revenue management, including a geo-referenced customer database, metering, billing and revenue collection.

The IDMIS forms a foundation for future operations and business improvement plans of the corporatized SEDD. The proposed IDMIS will enhance the directorate's ability to operate the

network and monitor performance at the directorate level including but not limited to: (i) aggregating the electricity received from the national grid to the directorate to become more financially and operationally accountable; (ii) enhancing electricity billing and revenue collections including energy auditing and (iii) localizing network monitoring and remote control and thus faster response to distribution network services.

**Component 3. Institutional Capacity Strengthening and Project Implementation-** (US\$ 15.0 million). This will include development of a regulatory framework and institutional capacity building aligned with the government reform program for improved accountability, governance, financial sustainability and increased private sector participation. The TA and advisory services will among others support the following:

- a. *Sector Restructuring and Corporatization*. This sub-activity will support basic, early reform actions which will support longer term reform and restructuring of the sector initially supporting the sector corporatization with regard to new business processes that contribute to better governance, improved performance management and greater efficiency. This shall include among others: (i) electricity sector institutional set-up; (ii) establishing a viable financing plan and initial business plans; and (iii) public awareness/communication with stakeholders on the corporatization process.
- b. Establishment of a Sector Modernization Unit within the MoE. This sub-component will support establishment of a Sector Modernization Unit within the MoE, as the first step towards the eventual establishment of an independent national regulator. Capacity development will also be provided to support those regulatory functions that are most urgently required within the sector including (a) secondary regulations required to operationalize the electricity law (b) tariff modeling; and (b) establishment of industry wide key performance indicators (KPIs).
- c. *Capacity Building and Institutional Strengthening*. This will support enhancing the SEDD institutional capacity as a corporate entity, for improved accountability, governance, and

financial sustainability as an "Island of Excellence"<sup>1</sup>; which model could be scaled up to cover other electricity distribution directorates as the sector reforms and corporatization are rolled-out. The support will include preparation of the SEDD Business Management Improvement Plan (BMIP) and setting of key performance indicators. The proposed support includes definition and re-engineering of the business and operational processes and practices including coaching, mentoring and training of SEDD staff.

#### Figure 1-1: ESREP theory of Change in Iraq



<sup>&</sup>lt;sup>1</sup> Directions for the WBG Energy Sector (2013), Strengthening governance—including addressing transparency, accountability, and public participation—is vital to ensuring that the sector function efficiently and that energy contribute to equitable economic, social, and environmental development".

#### **1.3.2 Project Development objectives**

The project's objective is to improve the reliability and enhance the operational and commercial efficiency of electricity services in the selected project areas of the South Electricity Distribution Directorate. The following **key indicators** will be measured to demonstrate the achievements of the objectives:

- I. Improve the reliability of electricity service delivery: Increased efficiency of distribution infrastructure (Percent Reduction in unserved energy due to limited transmission and distribution network capacity) [ 50percent-Baseline-111.0GWh (2017), Target-42.5GWh (2022)].
- II. Enhance the operational efficiency of electricity services: Reduction in technical losses (Percentage Reduction in Technical Losses) [17percent, Baseline-10.9MW (2017); 9.0MW (2022)].
- III. Improve Commercial operations: Increase in Billed/Supplied (Percentage increase in Billed/Supplied energy) [30percent -Baseline 40percent (2016); 70percent (2022)].

Additionally, the project contributes to several higher-level objectives:

- I. The project contributes to the detailed reform plan of the GoI to deliver better services to the public. Reform plans will provide fundamental building blocks for long-term employment growth and prosperity with a gradual transition from a centralized economy to a market-based economy.
- II. The project contributes to the World Bank's twin goals –alleviating poverty and promoting shared prosperity. The project will improve quality of life and enhance the disposable incomes of consumers, by improving power supply to the private sector and low income residential areas. Given the amount and nature of the distribution work involved in the project, it will also create considerable employment opportunities throughout its implementation.
- III. The project supports the MNA Regional Strategy by contributing to a number of its pillars, including: (i) Reconstruction and Recovery: by supporting the reconstruction of a network that is severely deteriorated as a result of regional neglect, conflict and instability; and (ii) Renewing the social contract: by supporting the electricity sector in early steps towards

longer term reform, restructuring and eventual privatization of its public enterprises, in addition to supporting increased financial performance concomitant with improved services and demonstrating a willingness to pay for them.

- IV. The project is fully aligned with the World Bank's Country Partnership Framework (CPF) for Iraq FY18-FY23 strategic focus areas, which are"(1) to address and help manage the critical fiscal situation; through supporting reforms that will have direct impact on the fiscal deficit; (2) to improve delivery of basic services with priority to areas where the security threat has diminished (Liberated Areas) and sub national governorates; and (3) to strengthen private and financial sector development".
- V. The project is aligned with the Maximizing Finance for Development approach and aligns to the "mainstream the upstream" theme by addressing the sector's fiscal sustainability to enable crowding in commercial financing in the electricity value chain related to gas-to-power. Improved revenue management in the distribution sub-sector will foster the upstream IPPs as it would provide predictable revenues required under the off-taker arrangements (Power Purchase Agreements). This, coupled with the proposed reforms in the gas sector and the resultant potential IPP gas supply agreements, provide incentives for further investments in the upstream gas capture and processing especially noting the emerging technologies regarding onsite gas-to-power conversion.

Additionally, proposed gender actions will contribute to closing gender gaps identified in the qualitative assessment (Annex 1) in the following areas: (i) women's ability to engage in educational activities and their health outcomes; (ii) income levels of women engaged in economic activities, including women-owned businesses; (iii) women's ability to engage in income generating activities; and (iv) women's voice and agency in the context of women's access to information and their ability to make decisions about their own lives and act on information provided to achieve desired outcomes. The project will close these gaps by:

a. Providing improved electricity service and regularly monitoring impacts of service improvements on: (i) women's ability to engage in economic activities, (ii) income levels of

women engaged in economic activities, including women-owned businesses; (iii) female students' ability to engage in educational activities, and (iv) women's health outcomes;

- Increasing women's information and awareness on energy efficiency, user rights and responsibilities concerning electricity service (e.g. impacts of nonpayment on service quality, bill payment options) by engaging women groups to conduct communication and awareness raising campaigns;
- c. Addressing electricity affordability concerns of vulnerable women groups, including femaleheaded households and IDP women while incentivizing legal connections by providing appropriate bill payment options;
- **d.** As part of skills re-development strategy in the SEDD, the project will also explore opportunities to build capacity on gender by: (i) reviewing current training plans and recommending gender-related content, and (ii) providing training on gender-related issues and relevance in the workplace. The project will also assess barriers that limit career progression of women employees, and design mentoring, coaching, and capacity building activities to support women employees' career development.

#### The following Gender Indicators will be considered:

- a. Number of project beneficiaries reported improvements in electricity service, of which female (percent);
- b. of which female-headed households (percent);
- c. Number of female-headed households provided with incentives (i.e. appropriate bill payment options) and gained access to formal electricity service;
- d. Number of IDP women provided incentives (i.e. appropriate bill payment options) and gained access to formal electricity service;
- e. Number of women reported engaging in income-generating activities due to improvements in electricity service;
- f. Number of women who engaged in income-generating activities reported increased income and productivity due to improvements in electricity service;
- g. of which women-owned businesses (percent);
- h. Number of women reported improved health outcomes (i.e. reduction of skin diseases)

due to improvements in electricity service;

- i. Number of women employed to conduct communication and awareness raising campaigns with women on energy efficiency, user rights and responsibilities concerning electricity service, impacts of illegal connections on service quality, and bill payment options;
- j. Number of women with increased understanding on energy efficiency, user rights and responsibilities concerning electricity service (e.g. impacts of nonpayment on service quality, bill payment options);
- k. Number of female employees working in the electricity directorate reported increased capacity and skills development.

#### **1.3.3 Project Beneficiaries**

- I. Electricity Sector Institutions. The sector institutions including the MoE, the South Electricity Transmission Directorate (SETD) and especially the SEDD, are expected to benefit from the reforms and improved operations efficiency. Improved efficiency, transparency, and accountability of operations will not only improve the sector's performance but also enhance their image and credibility with shareholders and electricity customers alike, gaining support for sustained operations.
- **II. Households**. Households connected to the grid (estimated at about 550,000) will directly benefit from the improved electricity services reliability, whereas the general populace (estimated at about 6 million) will all benefit from the improved social services delivery because of improved electricity services availability and reliability (e.g., health, education and water supply).
- **III. Productive Enterprises.** Improved electricity supply reliability will contribute to increased productivity and income of productive enterprises as they will reduce their dependency on expensive diesel generation whose per unit cost is more than the grid supply. In addition, increased supply reliability would increase the existing firms' profitability from increased labor productivity (reduced idle hours), reduced materials' waste and high cost back-up generation.

# **1.3.4 Project Location**

The project will be implemented in the region served by SEDD covering the governorates of Basra, Al-Muthana, Dhi Qar, and Missan, geographically situated in the South of Iraq. The governorates' population is estimated at over 6.0 million of the country's total population of about 39.0 million.

## Figure 1-2: Map of Southern Iraq governorates



# CHAPTER TWO: LEGAL AND INSTITUTIONAL FRAMEWORK

#### 2.1 World Bank Safeguard Requirements

There are 10 keys Environmental and Social World Bank Safeguard Policies, which are intended to ensure that potentially adverse environmental and social consequences of projects financed by the Bank are identified, minimized and mitigated. World Bank Safeguard Policies have a three-part format:

- Operational Policies (OP) statement of policy objectives and operational principles including the roles and obligations of the Borrower and the Bank;
- Bank Procedures (BP) mandatory procedures to be followed by the Borrower and the Bank, and
- Good Practice (GP) non-mandatory advisory material.

#### Safeguard policies triggered for this project

The ESREP project has been classified as a "**Category B**" project; meaning that the potential impacts of the project are less adverse & more limited, fewer, site-specific, likely reversible as compared with Category A projects, and mitigation measures can be more easily designed/implemented.

The ESMF and subsequent ESIAs/ESMPs should comply with the safeguards policies and procedures of the World Bank (WB). The table below shows the WB policies, which could potentially be triggered by the project.

**Table 2-1 World Bank Safeguard requirements** 

Safeguard Policies	Policy Triggering	Justification
Environmental Assessment		The project will include the procurement and
OP/BP 4.01	Yes	installation of high voltage overhead transmission lines, substations, low voltage distribution networks and distribution transformers. Civil works such as

		shallow excavations, laying concrete foundations,
	1	erection of towers and poles, as well as stringing of
	l	cables and wires will take place. Several
	l	environmental impacts, including air emissions, noise,
	1	water pollution and generation of solid wastes are
	l	expected.
Natural Habitats OP/BP	No	The project interventions are not expected to take
4.04	1	place in areas of ecological importance. Transmission
	1	lines will be erected along already existing energy
	l	corridors passing through desert land.
Forests OP/BP 4.36	No	No forests exist within the project boundaries
Pest Management OP 4.09	No	No pests or agriculture related activities will take
	l	place
Physical Cultural Resources	Yes	Generally, Iraq is famous for hosting sites of historical
OP/BP 4.11	l	and cultural significance.
Indigenous Peoples OP/BP	No	No indigenous people exist within the project
4.10	l	boundaries.
Involuntary Resettlement	Yes	If during the lifespan of the project, there might be a
OP/BP 4.12	1	need for either fixed or mobile substations to be
	l	implemented which may require private land, then OP
	l	4.12 will be triggered. If any first year works and/or
		any known sites are determined to require physical
		any known sites are determined to require physical displacement, land acquisition, or loss of income, then
		any known sites are determined to require physical displacement, land acquisition, or loss of income, then the corresponding RAPs or ARAP will be prepared
		any known sites are determined to require physical displacement, land acquisition, or loss of income, then the corresponding RAPs or ARAP will be prepared before appraisal. Any project-affected persons and
		any known sites are determined to require physical displacement, land acquisition, or loss of income, then the corresponding RAPs or ARAP will be prepared before appraisal. Any project-affected persons and host communities should be provided the opportunity
		any known sites are determined to require physical displacement, land acquisition, or loss of income, then the corresponding RAPs or ARAP will be prepared before appraisal. Any project-affected persons and host communities should be provided the opportunity to participate in planning, implementing and
		any known sites are determined to require physical displacement, land acquisition, or loss of income, then the corresponding RAPs or ARAP will be prepared before appraisal. Any project-affected persons and host communities should be provided the opportunity to participate in planning, implementing and monitoring the resettlement program, as appropriate.
Safety of Dams OP/BP 4.37	No	any known sites are determined to require physical displacement, land acquisition, or loss of income, then the corresponding RAPs or ARAP will be prepared before appraisal. Any project-affected persons and host communities should be provided the opportunity to participate in planning, implementing and monitoring the resettlement program, as appropriate. No dams will be affected by the project.

Waterways OP/BP 7.50		waterways.
Projects in Disputed Areas	No	No activities will take place in any disputed areas.
OP/BP 7.60		

#### 2.2 Screening categories and Environmental Assessment procedures

Environmental Screening is a mandatory procedure under OP/BP 4.01 Environmental Assessment. The Bank undertakes an environmental screening of each proposed project for which it will provide funding in order to determine the appropriate extent and type of the Environmental Assessment to be conducted. The Bank classifies a proposed project into one of four categories, depending on the type, location, sensitivity and scale of the project and the nature and magnitude and scale of the project and the nature and magnitude of its potential environmental impacts.<sup>2</sup> These four categories are A, B, C, and FI (Financial Intermediary).

**Category A** projects are likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. For a Category A project, the beneficiary is responsible for preparing a report, normally a full EIA (or a suitably comprehensive regional or sector EIA).

**Category B** projects have potential adverse environmental impacts on human populations or environmentally important areas - including wetlands, forests, grasslands, and other natural habitats which are less adverse than those of Category A projects. Like Category A, a Category B environmental assessment examines the project's potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance.

**Category C.** To the Category C projects mainly correspond activities related to the conventional 3rd Category of projects, which are expected to have minor or no impacts on environment and therefore, do not need to be passed through the formal procedures of EIA and SEE. Subprojects/activities expected to be financed under the Project related mostly to data processing, institutional

<sup>&</sup>lt;sup>2</sup> See: Environmental Assessment Update Sourcebook, Environmental Department, April 1993. The World Bank

development, technical assistance and procurement of hardware/software activities will fall under this Category.

*Disclosure and public information*. In the case of Category C sub-projects, there will be no need for a special public hearing, but the project proponent should provide information to all interested parties about these activities by publishing posters, leaflets and brochures and posting on the website relevant information.

#### 2.3 National Legislations and Regulations

The project is subject to the following Iraqi laws and regulations:

- Law No. 12 of 1981: Land Acquisition Law
- Regulation No. 2 of 2001: Preservation of Water Resources
- Law No. 55 of 2002: The Law of Antiquities and Heritage
- Law No. 37 of 2008: Establishing the Ministry of Environment
- Law No. 2 of 2009: Protection and improvement of the environment and natural resources
- Law No. 27 of 2009: Protection and Improvement of Environment
- Law No. 17 for the year 2010: Protection of Wild Animals and Birds
- Law No. 41 of 2015: Noise Protection and Control.
- Law No. 37 of 2015: Labor codes, general labor and employment acts
- Ministerial Instruction No. 3 of 2012: Environmental determinants for the establishment of projects and monitoring of their safe implementation
- Ministerial Instruction No.12 of 2016: Occupational Health and Safety Requirements Regulations

National legislation and guidelines in Iraq generally address the potential environmental and social issues associated with the envisaged sub-projects. Iraq has also acceded to a large number of international environmental conventions and agreements and is committing new resources to assessments and plans to ensure their full implementation. With new laws requiring appropriate compliance with such international laws, a new approach to future environmental legislation is

starting to emerge. However, although Iraq is a party to the treaties, environmental regulation in Iraq has traditionally lagged behind international standards. An analysis of relevant national legal framework and identification of possible gaps with WB Operational Policies is discussed below.

#### General Environmental Legislation

Law No.2 of 2009 aims to protect and improve the environment and natural resources, by preserving public health, biodiversity and cultural and natural heritage, and by encouraging sustainable development and international and regional cooperation. The Law establishes a Council for the protection and improvement of the environment referring to the Ministry of Environment and cooperating with other Ministries. It also defines its duties and responsibilities. Smaller Councils are established in the different provinces of the country. This Law sets forth provisions for the regulation of air pollution and noise reduction; earth protection; biodiversity protection; management of hazardous waste; protection of the environment from pollution resulting from exploration and extraction of oil wealth and natural gas; establishment of an environmental protection fund; rewards; compensation for damages; and penal provisions.

#### Environmental Impact Assessment for projects

Law no. 27 of 2009 on the Protection and Improvement of the Environment describes an Environmental Impact Assessment (EIA) as: "a study and analysis of the environmental feasibility of proposed projects that may affect the creation or the exercise of their activities on human health and environmental safety of present and future with a view to protecting them." The new law also includes several criteria required in an EIA. According to Article 10, an EIA must include:

- determination of positive and negative impacts of the project on the environment and the impact of the environment surrounding it;
- the proposed means to prevent and address the causes of pollution in order to achieve compliance with environmental regulations and instructions;
- contingencies for pollution emergencies and potential precautions;
- possible alternative technology that is less harmful to the environment and the rational use of resources;

- provisions to reduce waste, such as the inclusion of recycled or reused materials when possible; and
- an assessment of the environmental feasibility of the project and an estimate of the cost of pollution relative to production.

The procedure for submitting an EIA is set out in Article 11. Before any work is to commence, the EIA must be submitted to the federal Ministry of Environment. Work may not commence until approval from the ministry has been received.

Although Law No. 27 includes an EIA requirement, several gaps have been identified, mainly in the procedural and compliance side:

- There is no screening procedure to determine applicability and level of detail of an EIA; and no requirement for scoping during which issues that should be taken into consideration are identified
- The law does not include a social assessment and there is no requirement for stakeholder consultation, public participation and disclosure
- ESMPs are not usually implemented and if implemented, they are not sufficiently monitored and followed up, in particular during the construction phase.

In the majority of the projects, contractors are not aware of their basic environmental and social roles and responsibilities (occupational health & safety, community safety, impacts due to temporary labor influx, etc.) and tender documents do not usually contain such clauses (i.e. ESMPs).

#### <u>Noise</u>

Law No. 41 of 2015 on Noise Protection and Control amends previous legislation, regulates methodological issues in noise control, sets limits for exposure times to continuous noise between 80 and 115 dBA, and determines daytime and nighttime standards for outdoor noise exposure. Law 41/2015 includes standards for ambient and occupational noise with correspondent exposure periods. The main gaps identified are:

- Ambient noise monitoring is not consistently conducted, and monitoring data is not available to the public.

- There is no tracking of compliance with occupational noise exposure during the majority of construction activities.
- Selected Noise limits are different from WBG limits. A brief comparison is presented in the table below.

Iraqi Law No. 41 Requirements			WB Requirements		
	Permissible noise intensity decibel			One hour $L_{Aeq}(dBA)$	
TYPE OF AREA	DAY 7:00 – 19:00	NIGHT 19:00- 07:00	Receptor	Day 07:00– 22:00	Night 22:00 - 07:00
Sensitive areas (Hospitals, clinics, convalescences and residential care homes)	50	40	Residential; Institutional; educational	55	45
Urban residential areas	60	50	Industrial; commercial	70	70
Suburban residential areas	55	45			
Hotels and hostels	55	40			
Educational institutions (schools, universities, kindergartens etc.)	55	45			
Industrial areas and public institutions	70	60			
Commercial and administrative areas and institutions	65	60			
Private areas (Airport, railway stations, harbors)	70	60			
Cultural institutions and protected areas	60	50			
Recreational areas	60	50			
Residential areas in	60	40			

# Table 2-2 Comparison of National and WBG Noise limits

industrial zones		

#### Occupational Health and Safety

Labor Law No.37 of 2015 and Ministerial Instruction No.12 of 2016: Occupational Health and Safety Requirements Regulations are the main legislation for health and safety issues. Law No.27/2015 differentiates between jobs depending on the circumstances and duties that the employees are conducting, bearing in mind that the New Labor Law includes more than 170 Articles, which include a number of new terms and additions. The Law organizes aspects of the relationship between the employer and employees, with the aim of protecting their rights and realizing sustainable improvement which is based on social justice, equality and providing suitable work for everybody without discrimination. The Law prohibits all types of compulsory labor and child labor and determines minimum working age (15 years) and to prevent any discrimination or harassment, whether direct or indirect.

The Law regulates the work of female employees by granting additional rights to those that existed in the old law. Furthermore, it addresses the work of subcontractors regarding the employees' rights, following the expansion of such work in Iraq without previous regulation. The law also regulates health of employees and stipulates that the National Centre of Occupational Health and Safety is to be in charge of planning and inspecting the implementation of health affairs in a manner that guarantees the safety of employees at work sites from occupational diseases and injuries, and sets out extensive requirements in this regard in order to achieve a healthy work environment.

The main gaps identified are (mainly during implementation):

- Lack of awareness to adhere to safe working measures among employers and workers.
- Contractors do not implement proper and complete occupational health and safety measures in order to reduce construction costs.
- There is limited capacity to monitor health and safety issues in some industrial sites
- Construction activities are usually not inspected for health and safety issues.

#### Cultural Heritage

Law No. 55/2002 defines all movable and immovable antiquities, archaeological properties and artefacts in Iraq. It regulates communication channels between the public and the type authorities for
each of contact between the public and the revealed and non-revealed archaeological sites. Provisions governing contact with archaeological sites extend also to encompass developmental activities like road construction and rehabilitation wherever these developmental activities lie within archaeological vicinity.

## Water

Article 3 of Regulation No.2 of 2001 prohibits the discharge or cast of wastes into public water irrespective of the entity (public and private). Entities are prohibited from discharging wastes, unless they obtain an approval to discharge wastes as per the criteria and specifications set out by the Environment Protection and Improvement Directorate (EPID). Article 4 prohibits discharging any pollutant into public waters, while article 5 authorizes the EPID to issue environmental restrictions pertaining to the quality of public water as well as the quality of water discharged into public water, sewage systems, or rainwater.

#### Hazardous substances and wastes

Law No. 27/2009 provides provisions for the handling of hazardous substances and wastes, and stipulates that they should conform with international standards and best practices for the protection of the environment. Instruction No. 3/2015 consists of 5 Articles and aims at organizing the management of hazardous wastes, either by those who produce them, transport or treat them. The producers should determine the types of waste, collect and storage them to be processed, obtain the environmental approval, keep both paper and electronic records on the quantities and types of waste and have transport documents if needed.

## Land Acquisition

Land acquisition and all related issues are governed locally by the Land Acquisition Law No. 12 issued in 1981 and updated in 1998. Primarily, the Government of Iraq (GoI) has the right to remove encroachers of state-owned lands without compensation

Iraqi law does not require consideration of alternatives to displacement of PAPs located on a state land, especially when it relates to having no legal title to the asset/property that PAPs are using. The Iraqi Acquisition Law neither entitles any illegal holder of a property for any kind of compensation, nor does it provide a fair compensation for those who have the legal tenure. The Project owner should take into consideration any possibilities of lost assets/livelihoods due to any action of economic displacement/ involuntary resettlement on people who occupy/utilize the land at the time of the Project implementation. This kind of involuntary resettlement is fairly addressed in the Resettlement Policy Framework attached to this ESMF and the WB's "Involuntary Resettlement OP/BP 4.12" in terms of applicability and means for compensation.

#### Human rights and Social Laws

The 2005 Constitution of Iraq guarantees fundamental rights to Iraqi citizens, men and women, including equality before the law, equal treatment before the law (Article 14); treatment with justice in judicial proceedings (Article 19(6)); participation in public affairs (Article 20); right to work (Article 22); and the preservation of the family, the protection of motherhood, childhood and old age, and the prohibition of child labor and violence in the family (Article 29). The Constitution also guarantees to all Iraqis, "especially women and children," "social and health security," "basic requirements for living a free and decent life," and income and housing (Article 30), as well as health care (Article 31), care for the persons with disabilities (Article 32), and education (Article 34).

Article 2 of the Iraqi Constitution declares Islam as the official religion of the state and as a foundation source of legislation, as is the case in most Arab countries. At the same time the Iraqi constitution reflects the religious and ethnic diversity of Iraq and stresses the protection of the rights of groups (Article 2 (4) 2, Article 3, Article 4, Article 7, Article 8 (8), Article 14, Article 41, Article 42, Article 43 of the Iraqi Constitution). The Iraqi Constitution stipulates that no law may be enacted that contradicts established provisions of Islam and, while also stipulating that no law may be enacted that contradicts the principles of democracy (Article 2 (1)).

Iraq is a party to eight of the nine core international human rights instruments, including: the International Covenant on Civil and Political Rights (ICCPR), the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW), the Convention on the rights of the Child (CRC) and its Optional Protocol on the involvement of children in armed conflict; the International Convention for the Protection of All Persons from Enforced Disappearance (ICPPED), and the

Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT). Iraq is not a party to the Rome Statute of the International Criminal Court (ICC), and the international crimes defined in the Rome Statute are not criminalized under its domestic law. Iraq has not accepted the ICC jurisdiction over the current situation under article 12(3) of the Rome Statute.

#### Rights of the Child

The 1987 Labor Law, as amended by the Coalition Provisional Authority Order Number 89, of 2004 sets the minimum age for employment at 15 and the minimum age for hazardous work at 18. Article 9 (2) of the Coalition Provisional Authority Order Number 89 outlines categories of work considered hazardous, including work underground, underwater, in an unhealthy environment or where a child is unreasonably confined to the premises, and where children are required to use dangerous machinery or handle heavy loads. Instruction No. 19 of 1987 includes additional prohibitions on hazardous labor for children, barring children from working with lead or toxic substances, in construction, and at tanneries or in any other place of employment that is hazardous to the health or morals of the child.

Order No. 89 sets employment conditions for children age 15 and older, including work hours, medical examinations and annual leave policies; it also provides for the creation of a register of employed young persons. Children employed in family enterprises are exempt from the Order's requirements, which may put these children at greater risk for involvement in the worst forms of child labor. Article 34 of the Constitution guarantees Iraqis the right to free education at all levels. Children in Iraq are required to attend school until age 12.

Order No. 89 prohibits slavery and similar practices, including forced labor, child trafficking, and illicit activities such as drug trafficking. The Constitution prohibits trafficking of women and children, as well as the sex trade. The Penal Code prohibits the enticement of children under 18 years into prostitution and provides for up to 10 years of imprisonment for violations. Order No. 89 outlaw's child prostitution and child pornography; violations are punishable by imprisonment. In 2012, the Government passed the 2012 anti-trafficking law, which proscribes penalties for both sex and labor trafficking and replaces portions of the labor and penal codes.

## **CHAPTER 3: BASELINE CONDITIONS**

## 3.1 Socio-economic Baseline

## **Overview**

#### <u>Basra</u>

The governorate of Basra is subdivided into seven districts: Abu Al-Khaseeb, Al-Midaina, Al-Qurna, AlZubair, Basra, Fao, and Shatt Al-Arab. The city of Basra, the governorate's capital, is Iraq's third largest urban center. The governorate population is estimated at about 2.65 million of the country's total population of about 33.80 million. The governorate has been a battleground during the last decades: the Iran-Iraq war, the two Gulf Wars, the Shiite uprisings against Saddam Hussain and the post-2003 insurgency all have negatively impacted the governorate. The majority of the governorate's population is composed of the Shia Arabs, in the south, the governorate is made up of a vast desert plain, intersected by the Shatt Al-Arab waterway which is formed by the confluence of the Tigris and Euphrates rivers at Al-Qurnah and empties into the Persian Gulf. Around Al-Qurnah and Al-Medina a number of lakes can be found, while marshland stretches from the north of the governorate into the neighboring governorates of Thi-Qar and Missan.

#### Al-Muthanna

Al-Muthanna is the second largest city in Iraq covering an area of around 51,000 km<sup>2</sup>, and has a population of around 770,000, the majority of which are Shia Arabs. The governorate is divided into four districts: Al-Samawa, Al-Khidhir, Al-Rumaitha and AlSalman. The governorates landscape is mostly desert land, with the surface water resources concentrated in the north around the Euphrates River. After the overthrow of Saddam Hussein, Muthanna governorate was no different from the rest of Iraq's Shia south, as it became a hotbed for a Shia groups and militias but has since regained peace.

## Dhi-Qar

The governorate of Dhi-Qar is located in the southeast of Iraq, and is divided into 5 districts Al-Chibayish, Al-Rifa'i, Shatrah, Nasiriyah, and Suq Al-Shuykh. Around 2 million people inhabit the governorate that stretches over an area of 129000 km2. The majority of Dhi-Qar's inhabitants are Shia Arabs. A Sunni minority and smaller communities of Assyrian and Chaldean Christians, and Mandeans also live in the governorate. Dhi-Qar mostly consists of a dry desert, but the Euphrates River crosses the governorate and feeds into the Hammar marshes, which have shrunk drastically in the 1990s after once covering around the third of the governorate, to clear land for oil exploration.

#### <u>Missan</u>

The governorate of Missan shares a border with Iran; the Al-Sheeb border crossing connects Missan with Iran. The governorate is divided into six districts: Ali Al-Gharbi, Al-Mejar Al-Kabir, Al-Maimouna, AlKahla, Amarah and Qal'at Saleh. The area of the governorate is around 16,000 km2, and the population is around 1.12 million, of which 72.4% reside in urban areas. The majority of Missan's inhabitants are Shia, but the governorate also hosts a Sunni minority and small communities of Christians and Mandeans, who are living in the Amarah, the capital of Missan. In regard to ethnicity, Arabs are the majority of the population, but a small group of Failli Kurds also lives in Missan. Despite having rich oil reserve fields, Missan has one of the highest poverty rates in Iraq. Previously dominated by marshlands, the geographical landscape of the governorate now consists of around 15% arable land and more than 50% desert, after the drainage campaign of the 1990s.

## **Economy and infrastructure**

Private consumption and investment in Iraq remain subdued due to an unstable security and political situation, and a poor business environment. Poverty, as estimated by the Iraqi government reached 22.5 percent in 2014 nationwide, and in the ISIS-affected governorates, the direct impact of economic, social and security disruptions is estimated to have doubled poverty rates to 44 percent. In the South, where poverty rates have always been high, the macro level shocks have increased estimated poverty rates to above 30 percent.

## <u>Basra</u>

Basra is considered of great economic significance, due to its location at the Shatt Al-Arab and its vast oil reserves. The port of Basra and the port of Um Qasr, Iraq's only deep-water port, are both located in the governorate, which makes the governorate a center for trade, transportation, and storage. Several manufacturing companies are also operating in the governorate. Off the coast of Basra, the strategically important Al-Basra Oil Terminal is the main oil outlet of Iraq. The city of Basra hosts a university and an international airport. However, poor infrastructure and aging oil installations are hampering Basra's economic prosperity, while the receding level of the Tigris and Euphrates, increased salinization and insufficient wastewater treatment capacity hamper agriculture in the governorate.

The province of Basra has all the six Iraqi ports, including the deep port. Thus, it is the transportation cross point of the southern part of Iraq. A highway links the Hashemite Kingdom of Jordan to Iraq, which starts from the Jordanian borders and ends in Basra. The province is also linked to the State of Kuwait via Safwan border crossing point, a main commercial outlet. Basra International Airport is the second largest airport in Iraq.

#### Al-Muthanna

Al-Muthanna is the poorest governorate in Iraq with even the best-off area —Al-Samawa experiencing poverty rate of 41%, while the poorest area Al-Hilal has poverty rate of over 73%. Al-Muthanna is an oil producing city, and contains a stock of large quantities of salt provided by Lake Sawa. More importantly, it is an important center for cement and construction material production, as it contains one of the largest repositories in the world of raw materials used in cement production. Al-Samawa city is home to the university of Al-Muthanna. The southern region of Iraq, including Al-Muthanna continues to lack adequate basic and social infrastructure. However, the governorate has the potential to be an important logistical center for people and goods, as the railroad between Baghdad and Basra passes through the city of Al-Samawa, as well as sharing a border with Saudi-Arabia. A strategic pipe line which transfers gas from the governorate of Basra to Baghdad passes through Muthanna Governorate. Although the infrastructure of Lake Sawa is in disrepair, it still has the potential to be a touristic hotspot. The various archeological sites spread throughout the government could be a touristic attraction for visitors from inside and outside Iraq.

#### Dhi-Qar

Dhi-Qar is one of the most underdeveloped governorates of Iraq. The poverty rate in Dhi-Qar is 37.6 percent, more than twice the national average. The economy relies heavily on agriculture, as it has traditionally been the major sector of the economy, and Dhi War has always been famed for its rice production. However, the agriculture sector has been failing to provide sufficient jobs and income for the governorates inhabitants. The draining of the marshes in the 1990s for oil exploration destroyed the traditional fishing and farming methods in Ma'dan. The public sector and construction have been one of the biggest job providers in the past decade. The growth in construction has been the result of internationally funded projects in the governorate. The governorate of Dhi-Qar also hosts a number of oil refineries, and a university located in the governorate's capital of Al-Nasiriyah.

Nasiriyya, the capital of Dhi-Qar, contains a power station that produces more than 600 MW and relies on crude oil and black oil for its fuel. There is also the Nasiriyya gas-powered station which uses natural gas and fuel oil. There is a road network connecting the governorate with the other neighbouring governorates, as well as a railroad line passing through the governorate connecting Basra and its ports with Baghdad, Turkey and Europe. Thi-Qar's infrastructure has been greatly suffering due to corruption and politically motivated neglect.

#### Missan

The economy of Missan governorate has been based around agriculture; however, the productivity of the governorate's agricultural sector has significantly declined after the devastation of the marshes during the draining campaigns. The public distribution system (PDS) a scheme of subsidized food, has also played a role in harming the governorates agricultural sector and the farmers, as it reduced

the market value of the governorates main crop – wheat. Missan could be considered an important industrial center, as it hosts a number of factories covering a range of industries including construction materials, paper products, and sugar production. The governorate has one power station, with a capacity of 1500 MW. Halfaya oil field, the fifth largest oil field in the country, is located in Missan, and produces around 100,000 barrels per day. The provincial capital Amarah also hosts the University of Misan. The decaying infrastructure and lack of investment are some of the reasons industrial development in Missan is hindered. The governorates infrastructure, as is the case with other southern provinces, has been neglected over the past decades. Sabotage and combat damage during the Iran-Iraq war and the 2003 invasion further damaged the governorates infrastructure.

## Humanitarian conditions

The humanitarian crisis in Iraq remains one of the world's largest and most unstable. In 2015, more than 650 000 people in areas affected by the conflict with the Islamic State of Iraq and the Levant (ISIL) have been displaced, including 135 500 who have fled fighting in Mosul since 17 October. In total, 3.03 million Iraqis are displaced and around 1.37 million have returned to retaken areas since January 2014. Three years of continuous conflict and economic stagnation has increased poverty rates and unemployment. Agricultural production has declined by 40 percent since 2014, undermining the country's food self-sufficiency. Some 2.9 million people – 77 percent of whom are women, children or elderly – are food insecure, forced to rely on negative and often irreversible coping strategies. (FAO 2016)

#### <u>Basra</u>

Although Basra governorate has remained relatively stable and secure since the 2008 clearing operation, security incidents do occur and often revolve around tribal conflicts. The relocation of security forces to the frontlines of the conflict with ISIL in 2014 could be a factor influencing the frequency of security incidents. Moreover, the level of poverty has seen an increase from 14.3% in 2007 to 16,1% in 2011. The unemployment rate of Basra is lower than in most other governorates of Iraq, but the labor market participation rate of women (10.3%) is among the lowest of the country.

## Al-Muthanna

The governorate of Muthanna is among the poorest governorates of Iraq, as the population living in poverty is thrice the national average. The literacy rate in Al-Muthanna us the lowest of the entire country, and there is limited access to primary and secondary education. Food insecurity and unemployment are other issues affecting the inhabitants of Muthanna. The unemployment rate is around 24%, twice the national rate and the female participation in the labour force is around 12%. The governorate witnessed various security incidents following the 2003 invasion, but peace has since returned to the governorate making it one of the safest governorates in Iraq.

## Dhi-Qar

The governorate of Dhi-Qar is the poorest governorate of Iraq. The population living under the poverty line (\$2,5) increased from 20.9% to 37.8% in 2007 and 2011 respectively. Dhi-Qar has an unemployment rate of 30.8%, and women make up 6.6% of the entire labour force of the governorate. The local agriculture-based economy of the marshlands was destroyed by the 1990s draining campaign, which results in a more stringent level of poverty in the marshlands area. As of 2011, Food insecurity faces around 17% of the population of Dhi-Qar; this number rose from 4% in 2007. The governorate scores below average in literacy rate and enrollment in primary and secondary education, compared to the Iraqi average. The governorate has one of the lowest security incidents in the country and has been relatively stable since 2008.

#### <u>Missan</u>

Missan performs poorly – and often worst – according to many developmental and humanitarian indicators. Missan is one of the poorest governorates of Iraq. The percentage of the population living under poverty line (2.5\$ per day) is around 25.3%, while the unemployment rate is 17%. The female labour force participation is 8%, and drops to 4% in rural areas, which is significantly lower than the national average. In contrast, food insecurity and the percentage of underweight children decreased between 2007 and 2011. Missan also scores lower than the national average concerning enrollment rates in primary and secondary education at 65.6% and 21.2% respectively; however, the enrollment rates have been steadily increasing over the past few years. The security situation in Missan has been relatively stable during the past few years, although sporadic mines and unexploded ordnance are still littered in the areas bordering Iran.

	Population unde	er Unemployment rate	Enrolment in	Enrollment in
	poverty line		primary education	secondary
				education
Basra	16.1 %	10.3%	91.4%	43%
Governorate				
Al-Muthana	29.4%	14.5%	85.9%	33.5%
Governorate				
Dhi-Qar	37.8%	19.4%	88.6%	42.2%
Governorate				
Missan	16.4%	15.4%	75.8%	31.4%
Governorate				
National	11.5%	11.3%	91 %	48.6%
Averages				

## Table 3-1 Unemployment, education and poverty compared to national averages

(Source: NGO Coordination Committee for Iraq 2015)

## Water, Sanitation Services and Health

Overall, Iraq has wide access to water and sanitation services because the government built large hydraulic infrastructure (dams and barrages), mainly in the 1980s. The poor have less access to improved water services than the non-poor, but the access gap between poor and non-poor is declining (World Bank 2017).

## <u>Basra</u>

Several environmental problems are threatening the governorate's fresh water supply. Dams and irrigation projects on the Tigris and Euphrates rivers have diverted much of the water flow heading to the Shatt Al-Arab, and with the receding water levels in the rivers, salt water from the Persian Gulf has reached ever further inland. Wastewater from both Iraq's and Iran's industry and households flows into the rivers untreated, further diminishing the water supply. Basra local water sources have relatively high salt content. Water from the general network is often only suitable for washing and

cleaning purposes. Drinking water is generally purchased from water tankers or markets which receive supplies from petrochemical plants that use reverse osmosis to remove the excess salt.

#### Figure 3-1: Prevalence of illiteracy, health issues and sanitation in Basra



(Source: Inter Agency Information and Analysis Unit 2010)

## Al-Muthanna

In Al-Muthanna, only 77.8% of the population has access to drinking water, and 66.7% of the households are connected to the public network, but even then, drinking water is often only available for a few hours daily, forcing more than 80% of the population to rely on other sources like water tankers. The governorate also has a lower than average score in regard to access to improved sanitation facility, as 91.8% of the inhabitants have access, compared to the 93.8% national average. The majority of Al-Muthannas' households rely on septic tanks and covered canals for wastewater disposal, with less than 3% of the households connected to the public sewage system.

#### Figure 3-2: Prevalence of illiteracy, health issues and sanitation in Al-Muthanna



(Source: Inter Agency Information and Analysis Unit 2010)

#### Dhi-Qar

Dhi-Qar has one of the lowest rates of connection to the public water system, as only 78.9% of the governorates inhabitants have access to an improved source of water and only a fifth of the governorates households rely on the public sewage system as a means of disposing of wastewater. Other households rely on septic tanks or outdoor canals. The access to services like water and electricity in Thi-Qar is below the national average. Access to electricity in Dhi-Qar is also below the national average, as less than 30% of the households rely solely on the public electricity grid, while the majority of the population relies on private generators. In addition, 70% of the population connected to the electricity network report power cuts upwards of 12 hours a day.



#### Figure 3-3: Prevalence of illiteracy, health issues and sanitation in Dhi-Qar

(Source: Inter Agency Information and Analysis Unit 2010)

#### Missan

In Missan, 88.3% of the population has sustainable access to an improved water source, which is higher than the national average of 86.8%. The majority of the households (80%) are connected to the public water network; however, water cuts are very frequent, and water availability is reported to be around one hour per day. Therefore, the majority of Missan's households rely on drawing water from water tankers or surface water, while only 5.6% depend on the public network as their source of drinking water. 91.3% of Missan's inhabitants have access to improved sanitation, which is slightly below the national average. 60% of the population depends on the public sewer network as the main wastewater disposal system, while the rest depend on septic tanks and covered canals. Less than 25% of the households in the governorate depend solely on the public electricity network, while the

majority partially or fully relies on private generators, as almost 80% of the households connected to the public electricity network report daily power cuts of more than 12 hours.



Figure 3-4: Prevalence of illiteracy, health issues and sanitation in Missan

(Source: Inter Agency Information and Analysis Unit 2010)

## Youth

Iraq's population is among the youngest in the world. Nearly 50 percent of its population is younger than 19 years old and approximately one-third are between 15 and 29 years old. Responsible for this large youth population is a high rate of early marriages and a low-level of female educational enrollment, both of which have a direct impact on fertility rates. Iraq has one of the highest adolescent birth rates in the region with 59 births per 1,000 women, compared to 46 in Egypt, 39.2 in Turkey, and 29.5 in Iran (World Bank, 2015).

## Women

Women with low levels of education and skills are often self-employed and concentrated in private sector activities. These are usually informal, low-paying jobs with almost no access to benefits such as health insurance, maternity leave, or pensions. Women working in the informal economy or private sector are generally excluded from the protections of the labor code as these do not apply to women "who are engaged in a family enterprise in which only family members work, and which is under the authority and supervision of the woman's spouse, father, mother, or brother" (UNDP Iraq, 2012).

Female labor force participation, at 15 percent, is low even relative to rates in the rest of the MENA region, which are themselves, at 20 to 25 percent, significantly low by global standards. Ninety percent of Iraqi women of working age are not in the labor force and those who work are often working part-time jobs. Labor force participation rates in Iraq differ according to the education level of women. Parity with men in employment opportunities and pay is reached only if women earn a university or college diploma (UNDP Iraq, 2012). Labor force participation for adult women with intermediate or lower levels of education is less than 10 percent, while for those with a secondary education, rates double to 24 percent. For women with a secondary and tertiary education, participation reaches 67 percent, compared to male participation rates of 70 to 75 percent. However, there has been an 8 percent decline in employment among the most highly educated women between 2007 and 2012 (World Bank 2017).

## Post -conflict situation and social cohesion in Southern Iraq

Since late 2017 there has been a rise in public anger and demonstrations against insufficient electricity supplies, poor water quality, perceived government corruption and poor public services, particularly in southern provinces. In 2017 there have been more than 260 separate protests, articulating highly-local demands such as wage increases, infrastructure development, or improved water and service provision. Large-scale electricity-related demonstrations concentrated around Nasiriyah, Basra, Samawah, and Rumaitha. By June, the region experienced at least one protest each day, focusing on clean water, employment, infrastructure development, and sufficient electricity.

These demonstrations are particularly evident in Basra and Dhi-Qar where the demonstrations were sparked in July 2018 by frequent electricity shortages. As a result of the storming of government buildings in Basra, Najaf, Karbala, and other southern cities, PM Haider al-Abadi sent Special Forces to Basra, and announced a state of emergency on July 15, 2018.

While the southern governorates remain relatively stable compared to Iraq's other governorates, they still witness tribal clashes and disputes since 2003, due to social conflicts. Governmental and non-governmental organizations have launched several initiatives in the past to encourage rival tribesmen to sign petitions to stop their fighting, which claimed the lives of several people over the years.



(Armed Conflict and Location & Event Data Project (ACLED) 2018)

Tribal struggles in Iraq are weakening efforts to reconstruct the country following the defeat of Islamic State, which occupied large parts of the country since June 2014. The full extent of the fighting, numbers of casualties, and especially the identification of tribes involved is not comprehensively covered by local media sources. More is revealed on local social media outlets; however, this information is more difficult to corroborate.

## **Iraqi Land Tenure**

The land tenure system in Iraq have a rooted background and clearly defined place in society, and an implicit acceptance by the population. Iraqi land institutional structures have powerful implications over land tenure arrangements and security. In fact, the institutional framework for land administration in Iraq shows varied levels and functions. In fact, groups of ministries and commissions manage and monitor the land tenure administration in Iraq, which respectively are financially and administratively governing the Iraqi land system seeking to provide the elements of a secure environment for land policies, planning and producing end-user's rights.

According to the Iraqi Ministry of Planning (2016), there are currently (4) ministries, and (2) independent agencies playing various roles in the Iraqi land sector<sup>3</sup>.

At the national council level, the four ministries mentioned below represent the Iraqi land authorities (ILAs) interconnected organizations at the national urban planning sectors in Iraq:

- 1. The Ministry of Agriculture (MoA) merges several departments to supervise the application of agricultural legislation for the various activities related to the organization of farm ownership, farmlands transactions and land and patterns of agricultural possession rights.
- 2. The Ministry of Justice (MoJ) and according to the Ministry of Justice Law No. (18) for the year 2005, the ministry has emerged a new institution which holds the judicial activities of the Iraqi Supreme Judicial Council and the rest of the activities of the judicial competence. Moreover, real estate registration departments are supervised by the ministry as well, and later added the Iraqi corrections department.
- 3. The Ministry of Construction & Housing (MoC&H) is responsible for the implementation of the national housing plans, and the general budget of the state related to public buildings sector projects. In other words, MoC&H is the Iraqi national housing authority, which coordinates with local governments units at the provinces level to implement housing

<sup>&</sup>lt;sup>3</sup> Al-Ossmi, L. H., & Ahmed, V. ("Land tenure administration: Towards a regulatory backdrop to land tenure in Iraq

<sup>-</sup> *Land Use Policy* 57," 2016)

programs. In fact, following MoC&H laws (decision 39 for the year 2001) Iraqi government has managed to develop national housing office to represent the MoC&H in the private housing sector activities and tasks.

4. The Iraqi Ministry of Municipalities & Public Works (MoM&PW) has a key role in developing national policy gathering all municipal aspects. In accordance to the Iraqi Law of Municipalities (No.44/year 1935) and its national duties, MoM&PW focuses on the implementation of the basic designs of cities facilities (MoM&PW, 2016). As part of the foundations of the MoM&PW, a Commission such as the General Directorate of Urban Planning (GDoUP) are required to handle the tasks and duties of the urban planning of the ministry for the Iraqi local level (Act No. 2, 2007; law No. 19, 2009). Therefore, the GDoUP directly supervises the performance of urban development plans for cities across the different urban planning bodies involved in provinces levels such as the Physical Planning Committee (PPC) and Municipalities Offices (MOs).

In addition, at the city council level (or local level), the Physical Planning Commission (PPC) and the Municipalities Offices (MOs) are also taking part in the Iraqi land institutional structure, which embeds both land authority's and council's views:

- 1. The Physical Planning Commission (PPC) primary role is to supervise and monitor the implementation of local developments and land use regulations at the provinces/city urban councils, and coordination with MOs at the neibourhood's level. PPC is working under the control of GDoUP, as a local government and at provinces level (Iraqi resolution No.31 for the year 1948; law No.19, 2009).
- 2. The Municipalities Offices (MOs), which represents the local government department of MoM&PW, according to the Iraqi law of administration to municipalities (No.165 of 1964), MOs work to cooperate with the competent authorities to organize and coordinate the town services according to a regulatory scheme duly certified by the competent authorities. Thus, MOs work under the supervision of MoM&PW via the GDoUP and the PPC to ensure implementation schemes inside the boundaries of city's master plan and the surrounding villages.

Figure 3-5 summarizes the interrelation of Iraq's multiple key stakeholders (6 agencies of ILAs) involved in the principal mechanism to foster an effective Land Tenure Administration (LTA) in the ILAs. In addition, the figure below showcases the land institutional prominent hierarchies, legitimately executed on a national level, province and city levels.

Figure 3-5: Overview of the ILAs Structure



(Source: Al-Ossmi, L. H., & Ahmed, V. (2016)/ Land Use Policy 57)

In practice, Iraqi authority's policies in relation to land tenure are devoted to land delivery, property, finance, building materials and standards; as regards policy reform and capacity building. According to Figure 3-5 above, the ILA's Organizational Structure reflects a primary problem in the completion of an effective implementation of a LTA as it does not ensure the institutional efficiency to monitor these planning and management policies, it only reflects the ILA's structure capabilities in setting these policies.

Thus, the ILA's structure lacks legislation and technologies promoting land tenure security operating between land users and land policies to ensure that individual and community land rights are documented and protected.

## The Iraqi historical background of LTA

The historical development of LTA has been influenced by the rapid transformation of the political, social and international spheres systems that could be traced starting from the contemporary history of Iraq. The development the LTA in Iraq relies on Iraqi's administration shifts, which could be divided into four distinctive eras according to historical hierarchies and to the existing LTA forms:

- The Ottoman land reforms in Iraq (1534):
- British occupation (1914)
- Socialism influences in Iraq (1958-1963)
- Nationalism influences in Iraq (1970s)

## Iraq's land crisis; following the regime fall in 2003

After the fall of the Iraqi regime in 2003, the new Iraqi government was faced with a huge legal problem regarding the transfer of lands and property ownership, which had been removed from thousands of families by Ba'ath. Also, the Iraqi refugee crisis presents a national humanity problem. Thus, by returning to Iraq, refugees could present as an indicator of tenure insecurity in vulnerable Iraqi communities with legal challenges to the authority of the land. According to the UN-Habitat report (2010), as a result of conflicts happening in Iraq, the urban residents living in slum conditions rose from 2.9 million in 2000 to approximately 10.7 million in 2010.

Moreover, the chaos of looting and destruction of public records following the ISIS attacks (between 2014 and 2016) has also increased legal challenges on the Iraqi land administration. Throughout the country, Iraq is facing an overwhelming amount of conflicted situation and lack of administrative roles in land and property policies. Due to consecutive wars, over 3 million Iraqis are currently displaced and over 110,000 displaced families and 700,000 displaced people in Baghdad alone (Iraqi Ministry of Displacement and Migration, 2016).

Meanwhile, rural families have migrated in large numbers to the urban areas seeking employment (in hope of better incomes) or due to the security crisis. According to the Iraqi Ministry of Displacement and Migration (2016) the migration within and into the Iraqi urban sector alone, which has a population of 2 million, has furthered the crisis.

Insufficient housing has been a problem throughout Iraq; recently, as there is a shortfall of up to three million dwellings in Iraq, due to multiple previous wars. According to the Iraqi Ministry of Construction and Housing (2016) this has led to the Iraq's government only meeting 15% of its social housing needs, yet there is a substantial unmet demand for housing.

Furthermore, according to Iraqi Central Bureau of Statistics (2012) there are few investors and developers to serve low-income and middle-income. For instance, USAID (2005) stated that following 2003, the main problem of the Iraqi land rights has emerged as a result of the absence of Iraqi land authorities such as land registration offices following 2003's incidents. Correspondingly, an eroded trust in the Iraqi authorities has arisen, and the ILAs claim that they have written strategy to address the land tenure crisis in Iraq. On the other hand, the Iraqi Ministry of Planning and the Ministry of Construction and Housing, for instance, have even offered free plots of lands in their national strategies (The Iraqi Ministry of Planning, 2016). However, these strategies have not implemented large-scale solutions to address the recent crisis yet. In addition to a long period of a highly centralized system of governance, has further aggravated the decline. All those factors have contributed to the deterioration of Iraq's housing and construction stock, a lack of maintenance and infrastructure.

#### **3.2 Environmental Baseline**

#### **Climate**

Iraq has a hot, dry climate characterized by long, hot, dry summers and short, cool winters. The climate is influenced by Iraq's location between the subtropical aridity of the Arabian desert areas and the subtropical humidity of the Persian Gulf. January is the coldest month, with temperatures from 5°C to 10°C. In most of the areas, summers are warm to hot with mostly sunshine, but high humidity on the southern coastal areas of the Persian Gulf. Daily Temperatures can be very hot; on some days temperatures can easily reach 113°F (45°C), especially in the Iraqi desert areas which causes a

danger of heat exhaustion. Hot, dry desert winds can be very strong sometimes and can cause violent sandstorms. About 70 percent of the average rainfall in the country falls between November and March. Precipitation is sometimes concentrated in local, but violent storms, causing erosion and local flooding, especially in the winter months.

## <u>Basra</u>

Basra Governorate has a desert climate with great temperature variations between day and night, summer and winter. The high temperature reaches 106°F (50°C); the low is above frost. Annual relative humidity is 44 to 59 percent; annual rainfall ranges between 2 and 8 inches (50–200 mm). Winters are warm, above freezing temperatures.

## Al-Muthanna

The climate in Al-Muthanna is a dry desert climate. Average temperatures are around 15°C January and can surpass 42°C in July. Rainfall is rather rare and restricted the winter months. Rainfall is lowest, around 17 mm in November, and reaches around 100 mm in February.

## Dhi-Qar

Dhi-Qar has a dry desert climate, as does the rest of Southern Iraq. Summers are hot and dry, with average high temperature reaching around 43°C, while and winters are mild, with the lowest average at around 17°C. Rainfall is limited to the months of November-April and averages 100 mm annually.

#### <u>Missan</u>

The climate of Missan is a typical desert climate, with dry, hot summers and cooler winters. The average high temperature reaches around 44°C, and the lowest average is around 17°C. Rainfall is restricted to the winter months and has an annual average of around 177 mm.

#### **Natural Resources**

## <u>Basra</u>

## IV.I. Surface Water

• In the Basra Province, the Tigris River extends from the boundaries of Maysan Province from the north, reaching its confluence with the Euphrates River in Al Qurnah District 47km (29 mi.) downstream. About 24 subsidiary rivers feed into the Tigris for a combined total length

of approximately 69,500 km (43,185 mi.). Settlement on both sides of the Tigris is recorded throughout history, a result of the river's source being constant and its banks fertile. The Euphrates River currently has two riverbeds in Basra Province. One is the old north riverbed, which enters the province coming from Dhi-Qar Province. It then flows eastwards, parallel with the east bank of Al Hammar Marsh, 40 km. (24.8 mi.) inside Basra Province, until it meets the Tigris River in Al Qurnah District. The river width varies from 50 m (164 ft.) when it enters the province to around 200 m (656 ft.) in Al Qurnah.

- The length of the Shatt Al-Arab River from Al Qurnah City to where it flows into the Arabian Gulf/Persian Gulf is around 95 km (59 mi.). Its width expands from Al Qurnah City, where it is about 25 m (82 ft.) wide, to Al Ma'qil Quarter, where it is about 305 m (1,000 ft.), to the Ashar area (457 m/1,499 ft.), to Muhammara City (805 m/2,641 ft.), to Al Fao City (1,600 m/5,249 ft.), and to around 2,500m (8,202 ft.) wide in its final flow to the Gulf.
- The Al Basra River extends to the west side of the Shatt Al-Arab River. It starts from Hareer Village and connects to Garmat Ali River in the north until it ends with the Khor Al Zubair water surface in the south. Its length is around 42 km (26 mi.). Through this river, the waters of the Al Hammar Marsh flow directly into the Arabian Gulf/Persian Gulf.
- A number of important new irrigation projects were implemented after 1991. These include: i) Al Iz River, built in 1993, extends on the west side of the Tigris for 32 km (20 mi.) before it flows into the Euphrates, about one km (0.62 mi.) west of the Tigris and Euphrates confluence in Al Qurnah. The Al Iz River project is one of the irrigation projects that caused the marshes to dry out. ii) Al-Masab Al-Aam River. The Al-Masab Al-Aam River canal, created in 1992, passes through the western part of the province. The south part of the river canal's flow curves along the west path of the Euphrates until it joins the Al Basra River four km (2.5 mi.) south of Hareer Village. The length of this part of the river is 210 km (130.5 mi.). It controls the irrigation waters and drains them to the Arabian Gulf, away from the rivers and marshes.
- The northern parts of Basra Province have both constant and seasonal surface waters in the form of marshes, such as Al Huweiza Marsh, which lies northeast; Al Qurnah Marsh in the northwest; and Al Hammar Marsh in the west. The marsh areas extend from Basra City to the

north of Al Qurnah. These areas lie west of Shatt Al-Arab and are on both sides of the Tigris River.

## <u>₩.II.</u> Groundwater

In the eastern part of the province there is little usable groundwater because of the existence of rivers and the high level of salinity, nor is groundwater needed. The opposite is true in the western part of the province, where groundwater plays a pivotal role and is considered an essential source of water dedicated for agricultural purposes and human settlement. The geographical nature of the area allows for storage of large amounts of water that can travel under and near the land surface.

## VI.III. Minerals

- Oil is considered one of the most important minerals available for exploitation in Basra Province. The Al Zubair, Al Rumailah, and Nehran Omar fields are areas of current extraction, while the west Qurnah fields and Majnoon fields are not yet exploited.
- Natural gas accompanies oil in all fields.
- Other materials include materials used for construction, such as sand and lime (34 million tons available), limestone (30 million tons available), and clay (4.8 million tons available).

## Al-Muthanna

- I. Minerals
  - Muthanna governorate is rich with raw materials of the low cost in extraction and production, such as, limestone which is used in cement industry, sedimentary compounds of Sodium and Chlorine as salty compounds used in salt production.
- II. Agriculture:
  - The Governorate is also characterized by lots of date palm orchards and its distinctive tourist site being near the Lake of Sawa and some tourist facilities.

#### Dhi-Qar

I. Agriculture:

Dhi-Qar governorate has agricultural lands that cover an area that exceeds which 6 million hectares. Date production represents the majority of the production of the agricultural sector,

followed by wheat, barley, rice, fruits and vegetables. This governorate is distinguished for its animal wealth such as buffalos, cows, cattle, goats, camels and fowls in addition to various vast areas in the marshland areas which are famous for canes, reeds, buffalo breeding and fishing.

II. Rivers:

The surface water resources in Dhi-Qar consist of Euphrates River, Al-Gharraf River, the most important tributary of the Tigris River, and other minor rivers branching from them. Both rivers pass through most governorate areas.

## III. Oil:

Dhi-Qar is rich in oil fields; the Nasiriyya field is regarded as one of the giant fields in Iraq, and its oil reserves are estimated within 16 billion barrels. Petronas of Malaysia is extracting oil from the Gharraf field north of the governorate. Dhi-Qar is a major oil governorate in Iraq similar to Basra and Imara governorates. There are plans to build an oil refinery in Dhi-Qar which will be the largest in Iraq, with a capacity reaching 300,000 barrels per day.

#### **Biodiversity**

The combination of rain shortage and extreme heat makes much of Iraq a desert. Some areas, however, although arid, do have natural vegetation in contrast to the desert. The majority of sites important for biodiversity conservation have no protected area status, although many have been recommended for designation. Over 400 species of birds have been recorded in the northern Gulf Region (comprising Kuwait, Iraq, eastern Saudi Arabia and western Iran). The region is especially important as part of the intercontinental flyways used by huge numbers of birds moving between Africa and Eurasia. It has been estimated that some two to three billion migrant birds move south across Arabia each autumn.

The Mesopotamian marshlands are unique ecological features at the confluence of the Tigris and Euphrates. They fall into three distinct areas: Hawizeh Marsh in the north, fed by the Tigris and Karkheh rivers, the Central (Qurnah) Marsh, which lies between the Tigris and the Euphrates, and the

Hammar Marsh to the south, traditionally fed by the Euphrates. The marshes are important economically and ecologically to all peoples of this area and are of global environmental significance.

Figure 3-6: Elevations and Principal Geographical Regions in Iraq



# CHAPTER FOUR: ENVIRONEMNTAL AND SOCIAL MANAGEMENT FRAMEWORK

## 4.1 Environmental and Social Impact Identification

During the construction phase, the following project benefits are expected:

• income generation through the creation of temporary jobs;

- development of small businesses (food, clothing, etc.); and
- increased income through the procurement of local and imported materials sold on the domestic market.

After the project implementation, the following positive impacts are expected:

- improved quality of life through the possibility of using electrical appliances and lighting of homes;
- improved security, due to public lighting;
- increased economic activities stemming from the development of businesses, mechanization and electrification of stores and workshops;
- access to information services (new technology, TV, etc.); and
- improved performance of administrative and social services as well as economic operators based in the project area (better working conditions, possibility of IT equipment, communication facilities).

Table 4-1 entails safeguard issues and potential negative impacts that are associated with the project during the **construction phase**. All the impacts listed below are largely of low to moderate significance. The anticipated impacts are limited to the specific routes and sites, hence localized. They are reversible and time limited. Mitigation hierarchy has been applied in order to avoid and/or minimize the impacts. Residual impacts are highlighted where applicable.

Er	Environmental and Social Impact Identification during Construction Phase					
	Sub-Project	Project Activity/aspect	Impact			
-	Overhead General Construction activities,	Escalated concerns/complaints not managed properly				
-	transmission lines Construction and rehabilitation of	including the use of heavy machinery and electricity generators. Excavation activities.	Improper Management of solid, liquid, and hazardous wastes including construction and demolition as well as household waste resulting in soil and surface water contamination.			
_	substations		Noise emissions			
	and their components	installation works and open	Air and dust emissions			
-	Other related	storage of materials and excavated soils Constructing permanent substations Utilization of subcontractors in construction activities	Water resources			
	activities		Environmental and public health risks by contamination with polychlorinated biphenyls (PCBs)			
			Soil /groundwater contamination from accidental fuel/engine oil spill refueling			
			Equipment on-site fueling			
			Improper disposal of wastewater from site offices and/or worker camps resulting in soil and surface water contamination.			
			Risk of damage to roads and other infrastructure caused by transit of heavy trucks			
			Risk of damage/breakage of underground utility lines and piping (drinking water, wastewater, electricity cables, telephone lines)			

## Table 4 -1 Environmental and Social Impact Identification during Construction Phase

	Occupational health & safety in relation to, but not limited to:	
	- Physical hazards from demolition waste	
	- Physical hazards from equipment and vehicles	
	- Fire Hazard	
	- Slippage and Falling	
	- Manual handling and lifting	
	- Electrocution	
	- Contact with live power lines	
	Heat exhaustion	
	Community health & safety in terms of car accidents or construction-related	
	incidents	
	I raffic congestion and blockage of access	
	Potential impacts associated with chance finds	
	Permanent/temporary land requirements/acquisition	
	Loss of Livelihood or assets and/or temporary loss of access to productive	
	Loss of Livenhood of assets and/of temporary loss of access to productive	
	Tesources	
	Poor Labor conditions	
	Risk of child labor	
	Increased risk of illicit behavior and crime	
Labor Influx associated risks	Influx of Additional Population ("Followers")	
and impacts	Increased burden on public service provision	
	Gender-based violence	
	Local inflation of prices and crowding out of local consumers	
	Social conflicts within and between communities	
	Increased risk of spread of communicable diseases	
	Labor Influx associated risks and impacts	

During the **Operation phase**, the following impacts are expected:

## IV. High voltage overhead transmission lines:

• Electromagnetic Fields (EMF)

The size of the Right of Way and the protection zone is largely determined by EMF. The EMF for 400 kV lines at a distance of 25 m from the footprint of the line is < 5 kV/m, which is in conformance with stipulated standard for limitless exposure. Therefore, a "Protection Zone" along the line should be at least 25 m from both of each side of the line corridor. When operating at 400 kV, the lines affected by the project will produce EMFs which could cause public health impacts especially when the lines pass too close to residential homes, schools or hospitals. Since these lines will pass across the desert, no long-term impacts are expected.

• Noise

HV Transmission lines produce noise through the Corona effect and noise levels can be significant, especially in foggy, damp, or rainy weather conditions, when power lines can create a subtle crackling sound due to the small amount of the electric current ionizing the moist air near the wires. The Corona effect can produce ozone and oxides of nitrogen in the air surrounding the conductor, especially in humid conditions. Corona consists of the ionization of air within a few centimeters immediately surrounding conductors. Ozone is a reactive form of oxygen and combines readily with other elements and compounds in the atmosphere.

• Aesthetics

The HV transmission lines will be permanent structures crossing wide areas of deserts which may disturb the natural aesthetic value of these desert landscapes. However, since the governorates in which the project will be implemented are famous for oil fields and flares in many parts of the desert, the natural aesthetic value of the desert has been significantly disturbed by the oil production sites. Therefore, the transmission lines and towers are expected to have a minor impact on the aesthetic value of the desert landscape in the southern governorates.

Bird collisions

There is a risk of birds colliding with the HV transmission wires.

## V. Low voltage distribution network

It is planned that the low voltage distribution networks will be installed using posts and overhead wires. Routine maintenance of such networks may require cutting some trees or blocking access to some roads. The planned interventions will be mainly replacing damaged or stolen parts of the networks. Any new additions to the network will be in urban settings.

#### VI. Substations

Many high-voltage circuit breakers, switches, and other pieces of equipment used in the transmission and distribution system are insulated with sulfur hexafluoride, which is a potent greenhouse gas (GHG). This gas can leak into the atmosphere from aging equipment or during maintenance and servicing.

## 4.7 Framework ESMP Implementation Arrangements

## 4.<sup>v</sup>.1 Introduction

A well-defined institutional and implementation mechanism for identifying, appraising, managing and monitoring safeguards at all levels is a key necessity. This section lays out the roles, responsibilities of various parties and the due diligence process that will need to take place from the preparation of an investment through implementation completion.

## 4.<sup>7</sup>.2 Overall project institutional and implementation arrangements

The SETD and SEDD shall be responsible for all the project implementations activities including procurement, safeguards, financial management, Monitoring & Evaluation, and project management functions. Each implementing entity has established a Project Management Team (PMT) that will be responsible for the overall project implementation as well as coordination and reporting to the Bank. Each PMT will be headed by a Project Manager and will comprise of teams' responsible for technical, financial management, environmental and social safeguards, and monitoring and evaluation.

The Project Management Team (PMT) includes qualified personnel who will be responsible for the environmental and social safeguards management among other aspects as listed below:

- Coordination
- Procurement
- Planning
- Financial aspects
- Operation
- Technical
- Environmental and social

The PMT will be in charge of all day-to-day planning, coordination, implementation and supervision of environmental/social safeguards specific to sub-projects, and will coordinate with all relevant agencies, and governorates.

An Owner's Engineer (OE) will support overall project implementation and capacity development of the SEDD and SETD PMTs in contract management, financial management and environmental and social safeguards. The OE shall provide support to the SEDD and SETD PMTs in the design, procurement and contract management to ensure smooth and efficient implementation of the project including project related environmental and social safeguards, monitoring and evaluation.

A Business Support Services Firm (BSSF), with experience in utility operations, will be hired to support the SEDD to strengthen its institutional capacity in key functions of corporate resources, commercial and network management and operations. The experts provided by the BSSF will work as managers/advisors twinned with the SEDD counterparts for a period of two to three years. The experts will inter alia: (i) assist the SEDD staff to maintain and over time improve the current level of service; (ii) coach, mentor, and enhance the capacity of their SEDD counterparts in the areas of their technical expertise; (iii) assist SEDD to develop and document organizational guidelines and procedures (operational manuals); (iv) assist SEDD to implement the IDMIS including the RPP systems; (v) assist SEDD to collect and keep record of performance data to be used as baseline data in

performance targets setting; and (vi) together with their SEDD counterparts, participate in the preparation and implementation of the corporate strategic plan and annual business plans.



It is envisaged that if additional capacity is required, the PMT may recruit external consultants who have sufficient expertise to support PMU' focal points. At the field level, it is expected that the PMZ's environmental and social focal points will conduct regular field supervision to ensure compliance of contractors, their workers and practices, to the ESMPs. The PMT will also require engineering and technical firms to recruit specialized staff in environment, social development and health and safety to conduct daily supervision on field activities and prepare noncompliance reports on which the PMU will investigate and take action accordingly.

The PMT will also be responsible for preparing and submitting quarterly progress reports providing detailed information on procurement, financial management, and environmental and social issues. In addition, an annual external audit, combining both technical and financial audit components, will be

conducted to ensure the appropriate use of funds and to monitor physical progress in the targeted activities.

The WB will provide continuous implementation support through regular supervision missions to ensure that the PDOs are met and that the results framework and the verification of DLIs are adequately measured. Further, the bank team based in Baghdad will be providing close handholding support on various project aspects especially on the technical, safeguards and fiduciary aspects.

## **Contractors**

Implementation of the ESMPs will largely be the contractors' responsibility. The contractor should nominate a qualified environmental, health and safety consultant and a social development consultant (recommended), to ensure compliance with the ESMPs during construction.

## **£.2.3** Environmental Monitoring

The ESREP will focus on effective environmental monitoring. As majority of the anticipated environmental impacts from the project are general in nature and related to construction and civil works, site management, worker/public safety etc., monitoring will be largely carried out in the form of compliance monitoring through regular site supervision by the responsible officers. A general monitoring checklist and a specific construction safety monitoring checklist to be used and filled during site supervision is provided in the ESMP framework. These lists should be updated and expanded to include impacts which are mostly case-specific and other site-specific environmental impacts based on actions agreed in the ESMPs.

Monitoring of environmental parameters (such as air, water, salinity, sediment quality, etc.) will be conducted based on the requirements specified in the individual ESMPs. The overall project impacts will be monitored during project implementation through a number of selected indicators, which reflect the positive environmental contribution from the project to the overall environment. The project should support independent environmental audits on an annual basis throughout project implementation.

## 4.2.4 Grievance Redress Mechanism

The SEDD and SETD will establish GRM units to handle project activity-related complaints or requests each with a dedicated focal point person. Each PMT Manager will have the overall responsibility to address concerns brought to the attention of the focal points regarding any environmental and/or social impacts due to Project activities

Given the nature of the project activities, the most effective mitigation measure for the identified risks will be ensuring that project beneficiaries and project-affected people are actively involved. In this regard, there are two main tools through which this can be achieved: (i) raising public awareness and carrying out mandatory public displays; and (ii) establishment of a viable grievance redress mechanism (GRM).

*Raising public awareness*: Information about the grievance handling system described below will be distributed at an early stage of the project to all project affected people through regular information channels used by the project, including initiating meetings at the start of the project where feasible, public meetings during project implementation, brochures/pamphlets in Arabic Language, posting on notice boards and online when necessary. The process of raising a complaint should be explained by reaching out the community or by conducting a meeting with community representatives. It is important that community representatives include women at all times.

*Grievance Redress Mechanism:* Transparency and accountability should be core elements of the Project. Comprehensive GRM will be set up for all subprojects to account for all potential complaints arising from the project's potential impacts. This will cover all types of complaints including those associated with Land acquisition and compensation. The latter complaints will be directed to a separate unit and handled separately. In addition to the main GRM, two additional GRMs will be developed by the contractor; one for the community and the second for the workers.

The goal of the GRM will be to increase transparency and accountability and to reduce the risk of the project inadvertently affecting citizens and serves as an important feedback and learning mechanism that can help improve project impact. The objective will be to provide channels for project stakeholders to provide feedback on project activities via a mechanism that allows for the identification and resolution of issues affecting the project, promptly and effectively in a culturally appropriate manner and at no cost. This includes safeguards-related complaints pertaining to this ESMF and the World Bank's safeguards policies as a whole.

A project-specific GRM for complaints handling will be developed at the Ministry of electricity with dedicated personnel from both the Transmission and Distribution directorates and made accessible to all. The following types of grievances are anticipated:

- The market value of land in case of land acquisition
- Delay in receiving compensation
- Loss of livelihood/asset
- Temporary Loss of access to productive resources
- Being subjected to pressure form the community of governmental officials to sell or donate the land
- Damage to infrastructure
- Traffic and access-related impacts
- Community health & safety
- Damage to existing roads
- Damage to existing crop land
- Temporary use of land
- Impacts associated with demolition and excavation and/or any other type of waste
- Noise impacts
- Road accidents related to project's traffic impacts

As a minimum, the project will establish the following channels through which citizens/beneficiaries/PAPs can make complaints regarding project-funded activities:

- a) A dedicated email address
- b) A dedicated phone line
- c) A dedicated address to send written letters
- d) Feedback boxes located at project sites
- e) Verbal or written complaints to community leaders, or project staff directly or through project meetings. If project stakeholders provide verbal feedback/complaint, project staff will lodge the complaint on their behalf, and it will be processed through the same channels.
- f) Periodic project meetings, each of which shall include women.
#### Procedures

The GRM should comprise of a set of operating procedures to ensure successful implementation. The procedures would include the following set of measures as a minimum:

- Receive and register complaints
- Grievance's document verification
- Conduct field inspections in order to verify and confirm the authenticity and eligibility of the reported grievance. The field inspection could include interviews with different parties involved.
- Referring cases to other GRMs, if necessary and/or to the courts.
- Referring cases to a third party
- Track, and evaluate the process and results

In case an agreement could not be reached, the borrower could play the role of a mediator via welltrained voluntary mediators following a pre-set time frame.

The borrower will include the construction-related GRMs into the contractor's terms of references and contracts. Accordingly, the contractor will establish an external GRM (for the community) and an internal one for the workers. The respective Contractor shall disclose the GRM on a board that is easily legible and accessible at all worksites. For the community GRM, a multi-stage mechanism will be used comprising of but not necessarily limited to the stages listed below:

- a) **Stage 1**, any person aggrieved by any aspect can lodge a grievance to the Contractor, which in turn should provide resolution within 10 calendar days;
- b) **Stage 2**, if the aggrieved person is not satisfied with the decision of the Contractor during Stage 1, she (he) can present the case to the supervising company to resolve within 10 calendar days.
- c) **Stage 3**, if the complainant is still dissatisfied with the outcome of stage 2, she (he) can escalate the complaint to the both the South Electricity Transmission Directorate (SETD) and the South Electricity Distribution Directorate (SEDD) to resolve the issue within 15 calendar days.

## **Grievance Redress Service**<sup>4</sup>

The World Bank's Grievance Redress Service (GRS) provides an additional, accessible way for individuals and communities to complain directly to the World Bank if they believe that a World Bank-financed project had or is likely to have adverse effects on them or their community. The GRS enhances the World Bank's responsiveness and accountability by ensuring that grievances are promptly reviewed and responded to, and working together identifies problems and solutions.

The GRS accepts complaints in English or the official language of the country of the person submitting the complaint. Submissions to the GRS may be sent by:

Email: grievances@worldbank.org Fax: +1-202-614-7313 Letter: The World Bank Grievance Redress Service (GRS) MSN MC 10-1018 1818 H St NW Washington, DC 20433, USA

# 4.2.5 Framework ESMP

#### General requirements for the construction phase:

- Included in the mitigation measures and applicable to all impacts will be the development of GRM as described above and the communication of its presence and the means to use it to the general public/community surrounding the project's area.
- The mitigation and monitoring measures listed below represent the minimum requirements based on which site-specific ESMPs or full-fledged ESIAs will be developed. ESMPs developed for each sub-project shall be included in the Contractors' TOR as well as the final contract. For projects with minimal E&S impacts, Checklist ESMPs will be used (The screening of the sub-projects and suggested safeguard instruments are presented in the following section).

<sup>&</sup>lt;sup>4</sup> <u>http://pubdocs.worldbank.org/en/440501429013195875/GRS-2015-BrochureDec.pdf</u>

- For full-fledged ESIAs, a number of environmental management plans shall be developed by the contractor and submitted for approval, these include but are not limited to:
- Construction Activity Pollution prevention & Soil erosion control plan
- Solid and Hazardous Waste Management Plan & procedures
- Occupational Health & Safety Plan & procedures

Table 4-2 includes the mitigation and monitoring measures for potential impacts during the construction phase.

Potential Environmental and Social Impacts	Sub-Projects	Mitigation Measures <sup>5</sup>	Monitoring Measures
All impacts (Escalated concerns/complaints not managed properly)	<ul> <li>Overhead transmission lines</li> <li>Substations</li> <li>Distribution networks and their components</li> <li>Other related activities</li> </ul>	<ul> <li>Conduct site-specific information sharing session and consultation prior to the commencement of any works. Ensure that the local communities have access to the ESMP in local language and are aware of the contractors' commitments.</li> <li>Develop a robust and multi-channels project level Grievance Redress Mechanism (GRM)</li> <li>Ensure dissemination of the GRM to local communities and potential PAPs prior to starting construction activities.</li> <li>Maintain solid documentation for the received complaints during the construction phase responsiveness (provision of feedback).</li> </ul>	<ul> <li>Review of the number of complaints received</li> <li>Review of the number of complaints solved and the time it took to solve them.</li> <li>Reporting on the awareness activities conducted (attendance sheets and photos etc.)</li> </ul>
Improper solid waste management (including demolition, excavation etc.)		<ul> <li>Establish, implement and maintain a Waste management plan reflecting good construction practices, including but not limited to:</li> <li>(\$) Assign &amp; train worker(s) to manage waste collection, and on-site management.</li> <li>(\$) Provide suitable Personal Protective Equipment (PPE) for workers assigned to manage demolition waste</li> <li>Anticipate mass / volume of possible solid waste</li> </ul>	<ul> <li>Daily inspection of waste containers or accumulations</li> <li>Weekly review of chain of custody or proof of contracting authorized waste handler</li> <li>Weekly review of proof of disposal at designated facility</li> <li>Daily review of signs of ash or waste accumulations</li> </ul>

# Table 4-2 Framework ESMP during Construction Phase

<sup>5</sup> (\$) denotes cost item

Improper management of hazardous waste and hazardous materials	<ul> <li>Surface water bodies</li> <li>Use excavated soil for leveling and backfilling where possible</li> <li>Clear the site from any construction waste at the end of construction</li> <li>Clearly identify and label hazardous waste or hazardous materials and ensure Material Safety Data Sheets (MSDS) are available in Arabic.</li> <li>Identify and provide contacts of closest authorities and emergency services to contact in case of incidents involving hazardous waste and materials.</li> <li>(\$) Assign &amp; train worker(s) to identify &amp; manage hazardous waste and materials.</li> <li>(\$) Provide suitable Personal Protective Equipment (PPE) for workers assigned to manage hazardous waste and materials.</li> <li>(\$) Provide relevant first-aid kits</li> <li>Anticipate mass and volume of possible hazardous waste.</li> <li>(\$) Arrange for a secure area on-site for hazardous material receiving and storage; area is properly shaded from rain and sun heat/light, and must have a water supply.</li> <li>(\$) Arrange for suitable waste containers and skips to be present for temporary waste storage.</li> </ul>	<ul> <li>Daily inspection of waste containers or accumulations</li> <li>Weekly review of chain of custody or proof of contracting authorized waste handler</li> <li>Weekly review of proof of disposal at designated facility</li> <li>Daily review of signs of ash or waste accumulations</li> <li>Weekly review of log of relevant incidents &amp; complaints</li> </ul>
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	- Prohibit mixing of different hazardous	
	wastes.	
	- (\$) Arrange with local authority or	
	authorized hazardous waste handler to	
	transport and dispose of hazardous waste in	
	an authorized facility.	
Noise emissions	- (\$) Provide suitable PPE for workers	- Weekly review of works schedule
	assigned to jobs in sustained high noise	- Review of PPE availability & usage
	levels.	during noisy works
	- Coordinate with facility management and/or	- Measure on-site ambient noise level
	surrounding community to avoid noisy tasks	near sensitive receptors (when
	during sensitive times of facility operation.	applicable) during construction
	- Seek to schedule noisy works in institutional	works
	vacation periods if working near sensitive	Workly review of poise complaints
	receptors (e.g. schools hospitals) is	- weekly leview of horse complaints
	unavoidable	and the time it took resolve them
	- Avoid scheduling noisy works during	
	nighttime (8 n m to 6 a m) near inhabited	
	areas	
	- Inform facility managers and users and/or	
	surrounding community of periods of	
	unavoidable noisy works	
Air and dust amissions	(\$) Provide suiteble DDE for workers	Waakly raviaw of works schedule
All and dust emissions	- (\$) Flowlde suitable FFE for workers	- Weekly leview of works schedule Weekly review of Dust wetting
	assigned to jobs in sustained high dust levels.	- weekly review of Dust weiting
	- Place construction equipment as far as	procedures
	possible from sensitive receptors.	- Review of PPE availability & usage
	- Economically spray water (preferably	during dusty works
	used/grey water) on roads, waste and dust	- Weekly review of Dust complaints
	piles to minimize emissions near sensitive	and the time it took to resolve them
	receptors.	
	- Cover any vehicle transporting dusty	

	<ul> <li>material to and from construction sites.</li> <li>Coordinate with facility management and/or surrounding community to ventilate dusty works in confined spaces in the facility.</li> <li>Seek to schedule dusty works in institutional vacation periods</li> <li>Inform facility managers and users and/or surrounding community of periods of unavoidable dusty works</li> </ul>	
Water resources	<ul> <li>Identify water needs for construction and obtain necessary approvals before the commencement of works</li> <li>(\$) If working near surface water bodies, use slit traps and erosion control measures and implement proper waste management measures to avoid contamination of the water</li> </ul>	<ul> <li>Water resourcing approvals or contracts before the commencement of construction</li> <li>Review consultant reports and implementation of measures</li> <li>Review complaints from the local community regarding the impact of the project on the quality of surface water</li> </ul>
Environmental and public health risks by contamination with polychlorinated biphenyls (PCBs)	<ul> <li>Identify PCB leaks, which is present on the exterior of equipment (whether on the outside of transformer, gasket and valve seepages and/or weepages.</li> <li>Identify PCB spills, which has been already released to the land.</li> <li>Perform the cleaning measures below within 48 hours of discovering the spill: <ol> <li>Collect all visibly spilled material</li> <li>Double wash and rinse all surfaces which will not be excavated using an approved solvent,</li> </ol> </li> </ul>	- Ongoing equipment maintenance and reporting

	<ul> <li>3) Excavate contaminated, concrete, asphalt, and ensure that an additional distance of one foot from the perimeter of the visible contamination is also excavated.</li> <li>4) Backfill the excavated area with clean material</li> <li>(\$) Take Special measures for packaging the excavated material and ultimate removal and disposal in-or out- of the country</li> </ul>	
Soil /groundwater contamination from accidental fuel/engine oil spill refueling	<ul> <li>Train personnel in safe fuel handling using drip pans to contain any spills during refueling activities</li> <li>Prevent uncontrolled waste dumping/storage</li> <li>Management of contaminated soil when storing, transporting and disposing to the designated landfill for hazardous waste.</li> </ul>	<ul> <li>Review consultant reports and implementation of measures</li> <li>Inspections for signs of leaks or spills</li> </ul>
Equipment on-site fueling	<ul> <li>Minimize on-site fuel container storage and fueling activities by planning fueling before site deployment.</li> <li>Designate a specific location on-site for fueling, maintenance, and lubrication activities.</li> <li>(\$) Provide impervious material such as geotextile or polymer sheets in locations on-site designated for fueling, maintenance, or lubrication.</li> <li>(\$) Provide adequate secondary containment (at least 110% of the volume of the inner container) for fuel storage tanks and for the</li> </ul>	<ul> <li>Weekly review of signs of spillage or contamination</li> <li>Weekly review of integrity of impervious layer</li> </ul>

	temporary storage of other fluids such as lubricating oils and hydraulic fluids.	
Improper disposal of wastewater from site offices and/or worker camps resulting in soil and surface water contamination.	<ul> <li>Ensure wastewater is collected in a heat-resistant tank installed over an impervious surface.</li> <li>Ensure that the tank is emptied when three quarters full via a specialized contractor and that the collected wastewater is discharged to the nearest wastewater treatment. The location of the latter should be indicated prior to starting the construction works.</li> </ul>	<ul> <li>Daily inspection for signs of leaks from the tank</li> <li>Daily inspections for signs of spills to the soil.</li> <li>Review the daily</li> </ul>
Risk of damage to roads and other infrastructure caused by transit of heavy trucks	- Routine inspection, and prompt repair of any damage road and blind spot.	<ul> <li>Daily inspection of roads and other infrastructure</li> <li>Review and log of the number of damages and the time it took to repair them</li> <li>Weekly review of complaints and the time it took to resolve them</li> </ul>
Risk of damage/breakage of underground utility lines and piping (drinking water, wastewater, electricity cables, telephone lines)	<ul> <li>Coordinate with local authorities and natural gas and electricity authorities before excavation.</li> <li>Conduct detailed identification and marking of all underground utility lines prior to any excavation work.</li> </ul>	- Confirm structural conditions and review of any damages that have occurred
All Occupational	<ul> <li>Establish, implement and maintain Occupational Health&amp; Safety Mitigation Plan according to Iraqi legislation and international best practices.</li> </ul>	<ul> <li>Review of the number of complaints received</li> <li>Review of the number of complaints solved and the time it took to solve them.</li> </ul>

Health & Safety Impacts (OHS)		<ul> <li>Review number of life insurances compared to number of workers</li> <li>Review number of Incidents</li> </ul>
<b>OHS:</b> Physical hazards from demolition waste	<ul> <li>Inform workers to stay vigilant in areas of demolition waste generation and storage.</li> <li>Same measures as for demolition waste management.</li> </ul>	- Daily log and review of relevant injuries & complaints
<b>OHS:</b> Physical hazards from equipment and vehicles	<ul> <li>(\$) Ensure drivers and machine operators undergo random medical and drug/alcohol detection checks.</li> <li>(\$) Train workers on equipment operation safety.</li> <li>(\$) Ensure equipment, machinery, and vehicles used is in good working condition.</li> <li>Create exclusion zones to limit access to equipment and vehicle maneuver lines.</li> <li>Avoid vehicle speeds higher than 20km/hr in project sites.</li> </ul>	<ul> <li>Monthly review of driver &amp; operator testing reports</li> <li>Monthly review of driver &amp; operator training certificates</li> <li>Inspection of exclusion zones</li> <li>Daily log and review of relevant incidents &amp; complaints</li> </ul>
<b>OHS:</b> Fire Hazard	<ul> <li>(\$) Train workers on identifying, avoiding fire hazards and the procedures to follow in case of fire.</li> <li>(\$) Provide fire extinguisher instruments and sand buckets in good working condition.</li> <li>Create strictly No-Smoking zones in fire risk areas such as fuel storage areas, excavations, near decomposing organic matter in waste piles and around water bodies.</li> <li>Avoid storing flammable materials in direct sunlight or near heat sources.</li> <li>Ensure suitable grounding and circuit breakers are available for electrical works.</li> </ul>	<ul> <li>Weekly review of fire extinguishing instruments</li> <li>Weekly review of flammable material containers &amp; storage</li> <li>Daily log and review of relevant incidents &amp; complaints</li> <li>Documentation of workers training</li> <li>Emergency procedures clearly visible on site</li> </ul>

	<ul> <li>Strictly avoid excavations in areas with residential natural gas connections or works near natural gas piping.</li> <li>Develop and implement Emergency Procedures to include contacts of closest authorities and emergency services to contact in case of incidents involving Fires.</li> </ul>	
<b>OHS:</b> Slippage and Falling	<ul> <li>(\$) Provision of suitable footwear to avoid slippage.</li> <li>Avoiding tasks on unstable slopes or soils without proper fall prevention precautions.</li> <li>(\$) Installation of guardrails at the edge of any fall hazard area.</li> <li>Proper use of ladders and scaffolds by trained employees.</li> <li>(\$) Use of fall prevention devices</li> <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>(\$) Inspection, maintenance, and replacement of fall protection equipment; and rescue of fall-arrested workers, among others.</li> <li>Establishment of criteria for use of 100 percent fall protection (typically when working over 2 meters above the working surface, but sometimes extended to 7 meters, depending on the activity). The fall protection system should be appropriate for the tower structure and necessary</li> </ul>	<ul> <li>Ongoing review of PPE availability &amp; usage</li> <li>On-going review of relevant fall prevention measures and awareness</li> <li>Weekly review of complaints received and the time it took to resolve them</li> <li>Daily log and review of relevant incidents &amp; complaints</li> </ul>

	<ul> <li>movements, including ascent, descent, and moving from point to point.</li> <li>(\$) Installation of fixtures on tower components to facilitate the use of fall protection systems;</li> <li>Signs and other obstructions should be removed from poles or structures prior to undertaking work</li> <li>(\$) An approved tool bag should be used for raising or lowering tools or materials to workers on structures.</li> <li>Safety belts should be of not less than 16 millimeters (mm) (5/8 inch) two-in-one nylon or material of equivalent strength. Rope safety belts should be replaced before signs of aging or fraying of fibers become evident</li> <li>When operating power tools at height, workers should use a second (backup) safety strap</li> </ul>
<b>OHS:</b> Manual handling and lifting	<ul> <li>Incorporating rest and stretch breaks into work processes and conducting job rotation</li> <li>Taking into consideration additional special conditions such as left-handed persons and persons with existing medical conditions</li> <li>Weekly review of complaints and the time it took to resolve them</li> </ul>
<b>OHS:</b> Electrocution	<ul> <li>Checking all electrical cords, cables, and hand power tools for frayed or exposed cords</li> <li>Following manufacturer recommendations for maximum permitted operating voltage of the portable hand tool</li> <li>Ongoing equipment and connection checks and reporting</li> <li>Daily log and review of incidents of complaints</li> </ul>

	<ul> <li>(\$) Protecting power cords and extension cords against damage from traffic by shielding or suspending above traffic areas</li> <li>Conducting detailed identification and marking of all buried electrical wiring prior to any excavation work</li> </ul>	
<b>OHS:</b> Live Power Lines	<ul> <li>Only allowing trained and certified workers to install, maintain, or repair electrical equipment;</li> <li>Deactivating and properly grounding live power distribution lines before work is performed on, or in close proximity, to the lines.</li> <li>Where maintenance and operation is required within minimum setback distances, specific training, safety measures, personal safety devices, and other precautions should be defined in a health and safety plan.</li> </ul>	<ul> <li>Ongoing inspections of Power lines</li> <li>Daily log and review of incidents &amp; complaints</li> <li>-</li> </ul>
<b>OHS:</b> Heat-related illness	<ul> <li>Implementation of OHS guidelines for working in hot conditions, including but not limited to the following:</li> <li>Educate workers about signs of heat-related illness, and ensure that medical services are available if needed</li> <li>(\$) Workers must have adequate potable (safe for drinking) water close to the work area</li> <li>Incorporate work/rest cycles. If possible, physical demands should be reduced during hot weather, or heavier work scheduled for cooler times of the day</li> </ul>	<ul> <li>Daily log and review of incidents and illnesses caused due to heat exposure (specifically during summer months)</li> <li>Daily review of heat-related complaints</li> </ul>

	- (\$) Ensure availability of special protective equipment	
Community health & safety	<ul> <li>Construction sites closed to the public.</li> <li>(\$) Fencing and delineation of the work areas and taking reasonable steps to prevent unauthorized people accessing the site and to monitor the number of people accessing the site.</li> <li>(\$) Use of signs, barriers (e.g. locks on doors, use of gates, use of steel posts surrounding transmission towers, particularly in urban areas), and education / public outreach to to clearly signal construction zones and prevent public contact with potentially dangerous equipment.</li> <li>(\$) Grounding conducting objects (e.g. fences or other metallic structures) installed near power lines to prevent shock.</li> <li>(\$) Rehabilitate any trenches once work is completed</li> <li>(\$) Regularly maintain equipment according to manufacturer's guidelines and inspect equipment for wear and tear and mechanical or electrical issues.</li> </ul>	<ul> <li>Daily inspection of construction sites</li> <li>Daily review of relevant incidents</li> <li>Daily review of complaints and the time it took to resolve them</li> <li>Review number of outreach programs conducted</li> <li>Equipment maintenance logs</li> </ul>
Traffic congestion and blockage of access	<ul> <li>Set up and implement Safety Traffic Plan.</li> <li>Inform local communities in case of anticipation of prolonged closure of roads or access routes.</li> <li>Assign trained workers to manage traffic in cases of works during peak traffic/ rush hours.</li> </ul>	<ul> <li>Ongoing identification, evaluation and monitoring of potential traffic and road safety risks</li> <li>Daily review and log of number of traffic accidents associated with workers and/or vehicles visiting the site.</li> </ul>

	<ul> <li>Coordinate with local authorities and traffic authorities in case of major disruption to traffic.</li> <li>Ensure traffic safety.</li> <li>Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement.</li> </ul>	- Daily review of complaints and the time it took to resolve them
Chance Finds	<ul> <li>In case of Chance Finds (antiquities/artifacts/monument):</li> <li>Stop the construction activities in the area of the chance find;</li> <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 Ministry take over;</li> <li>Notify the site manager supervisor who in turn will notify the responsible local authorities and the Antiquities Authority within 24 hours or less;</li> <li>Responsible local authorities and the Antiquities Authority would oversee protecting and preserving the site before deciding on subsequent appropriate procedures;</li> <li>Decisions on how to handle the finds shall be taken by the responsible authorities from the Antiquities Authority;</li> </ul>	<ul> <li>Review permitting procedures and ensure review by local Antiquities Authority</li> <li>Presence of personnel to guard the site until arrival of Antiquities Authority in case of chance finds</li> <li>Review number of Chance Finds</li> </ul>

	• Construction work can resume only after permission is given from the responsible local authorities and the Antiquities Authority	
Involuntary land acquisition	<ul> <li>Establish avoidance strategy for any land with any uses as a priority action.</li> <li>Identify and study alternative locations/routes if feasible.</li> <li>Develop a preliminary assessment report of land and livelihoods/assets loss.</li> <li>RPF was prepared stipulating the principles to be followed in case this impact is encountered.</li> <li>RAPs and ARAPs should be prepared as needed for individual cases where land and livelihoods loss will be encountered as an impact.</li> <li>All efforts are to be made to allow for harvesting of crops prior to any land-related impacts.</li> </ul>	<ul> <li>Review of the number of complaints received and the time it took to resolve them</li> <li>Monitor the implementation of RAPs &amp; ARAPs</li> </ul>

Loss of Livelihood or assets and/or temporary loss of access to productive resources	<ul> <li>Identify affected people as early as possible in the project's design phase and/or via stakeholder's consultation as part of the projects' specific ESIAs</li> <li>Preliminary assessment report of land and livelihoods/assets loss.</li> <li>Compensate for the loss of livelihood or assets by providing an alternative mean equivalent to the original.</li> <li>Compensate for the temporary loss of access to productive resources (example: land cultivation) by identifying the crops market value and quantities.</li> </ul>	- Review of the number of complaints received and the time it took to resolve them
Poor labor conditions	<ul> <li>Provide all the workers (workers refer to those working directly with the main contractor and /or subcontractors) with clean source of water/sufficient amount of bottled mineral water.</li> <li>Provide the workers with daily meals concurrent with the time they spend on site (i.e. minimum two meals per day). This is a must in remote areas and where food stores are not accessible.</li> <li>Ensure that the workers have contracts and that they are aware of their rights</li> <li>Ensure that all he workers working are life-insured.</li> <li>Ensure that all the workers are fairly compensated and are paid on time.</li> <li>Ensure that the workers are fully aware of the GRM</li> </ul>	<ul> <li>Daily and weekly inspections of : the updated list of names for the workers – the contracts and insurances .</li> <li>Daily review of complaints and the time it took to resolve them</li> </ul>

Risk of child labor	<ul> <li>Include clear and explicit measures in the contractors' contract to: i) prohibit labor under 15 years old in the main contract, ii) prohibit labor below the age of 18 that is hazardous, interferes with child's education or is harmful to child's physical or mental health iii) stipulate that these provisions are included in the entire sub contract as a binding condition.</li> </ul>	<ul> <li>Ongoing review of worker contracts</li> <li>Field supervision and ongoing Audits</li> <li>Review of incidents &amp; complaints and the time it took to resolve them</li> </ul>
Increased risk of illicit behavior and crime	<ul> <li>Enforce the national law.</li> <li>Ensure appropriate payment to both contractors and sub-contractors workers.</li> <li>Introduction of sanctions (e.g. dismissal) for workers involved in abuse or any inappropriate activities</li> <li>Provision of substance abuse prevention and management programs</li> <li>Creation of supervised leisure areas in workers' camp (if applicable).</li> </ul>	<ul> <li>Ongoing Audits</li> <li>Review number of incidents &amp; complaints and the time it took to resolve them</li> </ul>
Traffic congestion and blockage of access	<ul> <li>Set up and implement Safety Traffic Plan.</li> <li>Inform local communities in case of anticipation of prolonged closure of roads or access routes.</li> <li>Assign trained workers to manage traffic in cases of works during peak traffic/ rush hours.</li> <li>Coordinate with local authorities and traffic authorities in case of major disruption to traffic.</li> <li>Ensure traffic safety.</li> <li>Adjustment of working hours to local traffic</li> </ul>	<ul> <li>Ongoing identification, evaluation and monitoring of potential traffic and road safety risks</li> <li>Daily review and log of number of traffic accidents associated with workers and/or vehicles visiting the site.</li> <li>Daily review of complaints and the time it took to resolve them</li> </ul>

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	patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement.		
Worker influx	<ul> <li>Encourage the common practice of using local workers as this will reduce the transaction cost and will eliminate the risk of labor influx.</li> <li>Inform local communities in case of anticipation of high worker influx into project area.</li> <li>(\$) Provision of cultural sensitization training for workers regarding engagement with local community</li> <li>Code of conduct to be developed and all workers to adhere to.</li> <li>Provision of information regarding Worker Code of Conduct in local language(s) and follow up on compliance.</li> <li>Share with community and implement the approved GRM at all times during the construction phase and track the level of responsiveness (provision of feedback).</li> <li>Ensure that workers have monthly vacation to go visit their families.</li> <li>Ensure that the location of the workers' residence does not provoke any inconveniences to the local community.</li> <li>Keep records of number of workers coming from outside the governorate.</li> </ul>		Daily review of log of relevant incidents & complaints Ongoing field supervision

Influx of Additional Population ("Followers")	- Contractor to hire workers through recruitment offices and avoid hiring "at the gate" to discourage spontaneous influx of job seekers.	<ul> <li>Ongoing Monitoring of Number of "Followers" and hiring procedures</li> <li>Field supervision and ongoing Audits</li> </ul>
Increased burden on public service Provision	<ul> <li>(\$) Workers' camp to include wastewater disposal and septic systems</li> <li>Identification of authorized water supply source and prohibition of use from other community sources</li> <li>Worker Code of Conduct on water and electricity consumption.</li> </ul>	- Ongoing identification, evaluation and monitoring of burden on public service provision
Gender-based violence, including sexual harassment, child abuse and exploitation	<ul> <li>Mandatory and regular training for workers on required lawful conduct in host community and legal consequences for failure to comply with laws;</li> <li>Commitment / policy to cooperate with law enforcement agencies investigating perpetrators of gender-based violence;</li> <li>Creation of partnership with local NGO to report workers' misconduct and complaints/reports on gender-based violence or harassment through the GRM;</li> <li>Provision of opportunities for workers to regularly return to their families;</li> <li>Provision of opportunities for workers to take advantage of entertainment opportunities away from rural host communities</li> </ul>	<ul> <li>Ongoing review of worker contracts</li> <li>Field supervision and ongoing Audits</li> <li>Review of incidents &amp; complaints and the time it took to resolve them</li> </ul>

Local inflation of prices and crowding out of local consumers	- Provide and appropriate mix of locally and non-locally procured goods to allow local project benefits while reducing risk of crowding out of and price hikes for local consumers.	- Monitoring of local prices and security of supply.
Social conflicts within and between communities	<ul> <li>Provision of information regarding Worker Code of Conduct in Arabic</li> <li>Provision of cultural sensitization training for workers regarding engagement with local community</li> <li>Awareness-raising among local community and workers.</li> </ul>	<ul> <li>Ongoing Audits and monitoring of worker and community dynamics</li> <li>Review number of complaints and the time it took to resolve them</li> </ul>
Increased risk of communicable diseases	<ul> <li>Vaccinating workers against common and locally prevalent diseases</li> <li>Education about the transmission of diseases;</li> </ul>	<ul> <li>Ongoing log and review of incidents and illnesses and their cause</li> <li>Ongoing review of illness related complaints</li> </ul>

Table 4-3 includes the mitigation and monitoring measures for potential impacts during the operation phase.

Table 4-3 Framework ESM	P during O	peration Phase
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Potential Environmental and Social Impact	Sub- Projects	Mitigation Measures <sup>6</sup>	Monitoring Measures
All Impacts	All sub-projects during operation phase	<ul> <li>Develop a robust and multi-channels project level Grievance Redress Mechanism (GRM).</li> <li>Ensure dissemination of the GRM to local communities and potential PAPs prior to starting construction activities.</li> <li>Maintain solid documentation for the received complaints during the construction phase and track the level of responsiveness (provision of feedback).</li> </ul>	- Review of complaints and the time it took to solve them.
All Occupational Health & Safety Impacts		<ul> <li>Develop an occupational health&amp; safety mitigation plan according to Iraqi legislation and international best practices.</li> <li>Implement the occupational health&amp; safety plan during all operation phases.</li> <li>Ensure that all workers under both the contactors and the sub-contractors are covered by life insurance against any potential accidents.</li> </ul>	<ul> <li>Review of complaints and the time it took to solve them.</li> <li>Review number of life insurances compared to number of workers</li> </ul>

<sup>6</sup> (\$) denotes cost item

Potential Environmental and Social Impact	Sub- Projects	Mitigation Measures <sup>6</sup>	Monitoring Measures
Exposure to Electromagnetic Fields (EMF)	High voltage overhead transmission lines	<ul> <li>(\$) Training of workers in the identification of occupational EMF levels and hazards.</li> <li>(\$) Establishment and identification of safety zones to differentiate between work areas with expected elevated EMF levels compared to those acceptable for public exposure, limiting access to properly trained workers.</li> <li>Personal exposure monitoring equipment should be set to warn of exposure levels that are below occupational exposure reference levels (e.g. 50 percent).</li> <li>Action plans to address maintenance occupational exposure may include limiting exposure time through work rotation, increasing the distance between the source and the worker, when feasible, or the use of shielding materials.</li> <li>Consider public perception about EMF issues by consulting with the local community.</li> </ul>	<ul> <li>EMF monitoring (Follow detailed EMF monitoring plan)</li> <li>Review complaints and the time it took to resolve them</li> </ul>
Bird Collisions	High Voltage overhead transmission lines	- (\$) Install visibility enhancement objects such as marker balls, bird deterrents, or diverters.	- Monthly log and review of bird collisions

Potential Environmental and Social Impact	Sub- Projects	Mitigation Measures <sup>6</sup>	Monitoring Measures
Cutting of trees	Routine maintenance of low voltage distribution network	- (\$) Replantation of trees	- Monthly log & review of number of trees cut and number of trees replanted
Traffic and blocking Access to roads	Routine maintenance of low voltage distribution network	<ul> <li>Assign trained workers to manage traffic in cases of works during peak traffic/ rush hours</li> <li>Inform local communities in case of anticipation of prolonged closure of roads or access routes</li> <li>Coordinate with local authorities and traffic authorities in case of major disruption to traffic</li> <li>Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement.</li> </ul>	- Daily log and review of incidents & complaints and the time it took to resolve them
Sulfur hexafluoride and other GHG leakage into atmosphere from aging equipment or during maintenance and servicing	Substations	<ul> <li>Adopt safe working practices including working only in well-ventilated areas, refraining from smoking in designated areas, and controlling arc welding</li> <li>Immediately evacuate areas where there is a potential SF6 leak</li> <li>Use suitable clothing including overalls, footwear, rubber gloves, goggles and appropriate respiratory devices.</li> <li>If contamination occurred during normal operation of equipment, the SF6 can be</li> </ul>	- Ongoing review of maintenance reports

Potential Environmental and Social Impact	Sub- Projects	Mitigation Measures <sup>6</sup>	Monitoring Measures
		<ul> <li>reclaimed through normal recycling. However, the contaminated gas should be evacuated into a storage vessel and held in storage until it can be shipped to a purification center, if the contamination occurred during abnormal operation of equipment,</li> <li>(\$) Treat solid decomposition products with neutralizing agents before disposal in an approved landfill.</li> <li>(\$) Regular maintenance and servicing including periodic measurement of pressure, moisture content, and leakage using a conventional method of leak location</li> </ul>	
Environmental and public health risks by contamination with polychlorinated biphenyls (PCBs)	Rehabilitation of transformer Substations and/or switching substations	<ul> <li>Identify PCB leaks, which is present on the exterior of equipment (whether on the outside of transformer, gasket and valve seepages and/or weepages.</li> <li>Identify PCB spills, which has been already released to the land.</li> <li>Perform the cleaning measures below within 48 hours of discovering the spill: <ol> <li>Collect all visibly spilled material</li> <li>Double wash and rinse all surfaces which will not be excavated using an approved solvent,</li> </ol> </li> </ul>	- Ongoing equipment maintenance and reporting

Potential Environmental and Social Impact	Sub- Projects	Mitigation Measures <sup>6</sup>	Monitoring Measures
		<ul> <li>3) Excavate contaminated, concrete, asphalt, and ensure that an additional distance of one foot from the perimeter of the visible contamination is also excavated.</li> <li>4) Backfill the excavated area with clean material</li> <li>(\$) Take Special measures for packaging the excavated material and ultimate removal and disposal in-or out- of the country</li> </ul>	
Safety risk to the public at or near project activity	Transmission Towers Electricity network	<ul> <li>(\$) Use of signs, barriers (e.g. locks on doors, use of gates, use of steel posts surrounding transmission towers, particularly in urban areas), and education / public outreach to prevent public contact with potentially dangerous equipment</li> <li>(\$) Grounding conducting objects (e.g. fences or other metallic structures) installed near power lines, to prevent shock.</li> </ul>	<ul> <li>Daily inspection of project site</li> <li>Daily log and review of incidents &amp; complaints and the time it took to resolve them</li> </ul>

# 4.3 Sub-project Environmental and Social Screening and Approval Framework

A framework methodology is proposed and presented in this section for the screening, categorization, review, approval, safeguarding, and monitoring of sub-projects. Sub-projects are screened for potential ES impacts using the screening checklists included as **Annex 2**. The objective of the screening will be to exclude projects with high ES impacts (Category A projects) and to determine the appropriate type of safeguard instruments among the following:

- **Checklist ESMP**: for sub-projects resulting in relatively low-significance environmental and social impacts. The checklist represents the minimum E&S requirements during the construction phase.
- **Site-specific ESMP**: for sub-projects resulting in relatively medium-significance environmental and social impacts.
- **Site-specific ESIA**: for sub-projects resulting in relatively high-significance environmental and social impacts.
- **ARAP/RAP:** for sub-projects and activities resulting in temporary and/or permanent resettlement activities.

#### **Environmental and Social Screening and Approval Framework**

A framework methodology is proposed in this section for the screening, categorization, review, approval, safeguarding, and monitoring of ESREP sub-projects. Each sub-project will be screened for potential ES impacts using the screening checklists included as Annex 2.

The Bank will then review the screening results and accordingly the safeguards relevant instruments shall be confirmed, prepared, consulted with stakeholders and disclosed. Following clearance of the safeguards instruments by the Bank and/or government, the ESMPs shall be implemented, supervised and monitored. Figure 4-1 outlines the proposed methodology.



# Figure 4-1: Outline of the ES Screening and Approval Methodology

Potential sub-projects as received from the Transmission Department are listed and categorized as shown in Table 4-4. In general, the screening checklists in Annex 2 shall be used as mentioned to determine the appropriate safeguard instruments. However, as a general guide, appropriate safeguard instruments have been proposed for the sub-projects identified to date (Table 4-4).

Table 4-4 Safeguard	l instruments proposed	for the sub-projects i	dentified to date
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Sub-project	Selected Safeguard Instrument	Justification
Installing new transformers and mobile stations at existing stations	Checklist ESMPs	Intervention limited to installing one or more transformers with minimal environmental and social impacts. Land already existing
Rehabilitation and wiring of the lines	Site- specific ESIAs	Impacts will depend on the route and surrounding sensitive receptors and a full-fledged ESIA has to be prepared.
Rehabilitation of the sub- stations	Site- specific ESMPs	Projects with medium significance impacts. Impacts will depend on the size of rehabilitation and surrounding sensitive receptors

Construction & Civil works	Site- specific ESMPs	Projects with medium significance impacts. Impacts will depend on the size of rehabilitation and surrounding sensitive receptors
Expansion works for existing stations	Site- specific ESMPs	Projects with medium significance impacts. Impacts will depend on the size of rehabilitation and surrounding sensitive receptors

The sub-project safeguarding, approval and disclosure methodology is shown below in Table 4-5

Table 4-5 Safeguarding, approval and disclosure methodology

Step	Scope	Criteria	Outcome
1- Screening for Potential Environmental and Social Safeguard Impacts and Determination of Safeguards Category for each Sub -project	<ul> <li>Screen proposed sub-project according to safeguards checklist (Annex 2)</li> <li>Determine applicable World Bank requirements</li> <li>Determine instruments needed to meet requirements</li> </ul>	Checklist ESMP: for sub-projects resulting in relatively low- significance E&S impacts. Site-specific ESMP: for sub-projects resulting in relatively medium- significance E&S impacts. Site-specific ESIA: for sub-projects resulting in relatively high- significance environmental and social impacts. ARAP/RAP: for sub- projects and activities resulting in temporary and/or permanent resettlement activities.	ES Assessments and Management & Monitoring instruments
Review of Safeguards Screening by the World Bank	<ul> <li>Prepare subproject- specific Safeguards Screening Summary</li> <li>Assess Safeguards Screening</li> </ul>	A. Safeguards Screening Summary (SSS) <i>i.</i> Screening Rationale <i>ii.</i> Safeguard instruments submitted as part of sub- project identification package	<ul> <li>A. Safeguards Screening Summary (SSS)</li> <li>B. Approval/Revision of SSS</li> </ul>

		<i>B</i> . Selective review of SSS	
Preparation of Safeguards Instruments, Consultation and Disclosure	<ul> <li>Draft ES instruments</li> <li>Consult on draft ES instruments</li> <li>Incorporate feedback in final ES instruments</li> </ul>	<ul> <li>Draft ES instruments according to WB requirements</li> <li>Liaise with WB in case clarifications or changes arise</li> <li>Include project stakeholders, project-affected groups, local NGOs in consultations</li> <li>Initiate consultations as early as possible</li> <li>Provide relevant material in Arabic, comprehensible and accessible formats</li> <li>Ensure enough time is provided to examine documents ahead of consultation events</li> <li>Document stakeholder feedback and ensure disclosure &amp; meaningful consultation</li> <li>Show how stakeholder feedback was addressed in final ES instrument</li> </ul>	<ul> <li>Draft ES instruments</li> <li>Consultation on draft ES instruments</li> <li>Final ES instruments</li> </ul>
Review and Clearance of Safeguard Instruments	Review and clearance of ES instruments	- Review according to WB requirements	Cleared ES instrument according to WB requirements
Implementation of Agreed Actions and Supervision, Monitoring and Evaluation	<ul><li>A. ES safeguards implementation</li><li>B. Safeguard implementation</li></ul>	A. Sub-project proponent contractually obliged to implements ES safeguards	A. ES instrument implementation
	supervision C. Monitoring & Evaluation	B. WB team may conduct regular visits to supervise implementation of safeguards instruments and compliance with the	B. ES Instrument implementation review

	Doult notion	C ES in atman ant
	вапк ропсу	C. ES instrument
	requirements.	implementation
		monitoring, evaluation,
	C. Independent	and improvements
	consultants carry out	
	monitoring programs	

# 4.4 Capacity building and training needs

Upon ESMF approval by the WB and adoption, it is recommended that the following stakeholders undergo training on ESMF application:

- Environmental/Safeguards Focal Points of the PMT
- Relevant staff of the Basra, Al-Muthana, Dhi Qar, and Missan governorates, Ministry of Electricity officials and the staff of both the South Electricity Transmission Directorate (SETD) and the South Electricity Distribution Directorate (SEDD)
- Relevant staff of the Owner's Engineer and Business Support Services Firm
- NGOs which could be associated with the implementation and monitoring of the ESMPs.
- Other project stakeholders interested/potential ESREP partners

ESMF Training will be customized to the roles of the various stakeholders to include:

- Sub-project screening, categorization, ES instrument preparation, and disclosure
- Overview of the ESMF structure, including positive list of subprojects
- Mitigation measures implementation
- Monitoring measures implementation
- Templates, archiving and reporting
- Project data analysis and project improvements

In addition, worker training is needed to minimize incident risk and ensure compliance with ESMF/ESMP provisions. Relevant training topics to be delivered by the contractor for worker training include:

- Customized Occupational Health and Safety
- First aid & Emergency response
- Training on sub-project ESMP preparation and implementation

# 4.5 ESMF Cost Estimate

The table below includes a preliminary cost estimate for the implementation of the ESMP

Activity	Unit	Unit Rate in US\$	Quantity	Total in US\$
1. ESIA/ESMP preparation	Study/Report			
	ESMP	20,000	10	200,000
	ESIA	30,000	20	600,000
Sub-total (1)				800,000
2. Personnel (management & monitoring)	Man Month (MM)			
PCU Level				
- Environmental & Social Consultant <b>PMT Level</b>		3000	60	180,000
- Environmental Consultant		3000	60	180,000
- Social development officer/consultant		3000	60	180,000
Sub-total (2)				540,000
3. aining and awareness				
<ul> <li>Training for PMT and other relevant entities on environmental and social safeguards.</li> <li>Training for PMT and other relevant entities on environmental and social monitoring</li> <li>Training for contractors on the implementation and monitoring of the environmental/social management plans</li> </ul>	Lump-sum	Lump-sum	Lump- sum	
- Sub-total (3)				100,000
4. Contingencies (approx. 10% of total costs)				144,000

Total Cost

US\$ 1,584,000

# **ANNEXES**

Annex 1: Gender Analysis and Implementation Plan
Annex 2: Environmental & Social Screening Criteria/Checklists
Annex 3: Resettlement Policy Framework (RPF)
Annex 4: Environmental and Social Management Plan (ESMP) Outline
Annex 5: Environmental & Social Management Plan (ESMP) Sub-project
Monitoring Checklist for Contractors
Annex 6: Consultation Summary Note

# **Annex 1: Gender Analysis and Implementation Plan**

- 1. Background Iraq faces significant challenges in closing opportunity and outcome gaps between women/girls and men/boys in human endowments (i.e. education and health), economic opportunities, and voice and agency due to various factors, including long-standing political instability and worsening security situation in the country. The gender gaps are significant in the field of education.<sup>7</sup> One in three girls aged 12 to 14 is not enrolled in school, while one in ten of those in the same age group has never attended school. Gross enrollment rates are much lower for girls than boys at 19, 32, and 15 percentage points in primary, intermediate, and secondary school respectively.<sup>8</sup> Social constraints as well as distance from schools, particularly in rural areas make it harder for girls to attend schools. Female labor force participation (% of female population 15+) in Iraq is at 19 percent in 2017, which is significantly lower than the MNA regional average of 22 percent.<sup>9</sup> Women with low levels of education are primarily self-employed and concentrated in private sector. These jobs are usually informal and low paying with no access to benefits such as health insurance, maternity leave, or pensions.<sup>10</sup> There are wage and earning gaps between women and men: (i) in the public sector, on average, males earn 20 percent more than women in 2012, and (ii) in the private sector, the wage gap is almost eight times wider than the gap in the public sector.<sup>11</sup> Women in Iraq have been significantly affected by the security situation. Women and girls face high risk of violence and rising trend in the incidence of violence by their intimate partner, and other domestic violence is attributed to forced displacement. According to a 2006 study, one in five women in Iraq experienced intimate partner violence, and the rate is likely to have increased due to political instability and armed conflict. Iraqi women comprised 10 percent of adult civilian deaths between 2003-2013.<sup>12</sup> In 2007, 133 women were victims of moral killings by militia in Basra. Lastly, women are facing the threat of being abducted into the sex slave market due to the presence of terrorist groups in the country.<sup>13</sup>
- 2. **Gender Assessment Results**. To understand impacts of electricity service unreliability and unavailability on Iraqi women's economic and social well-being in the Basra Governorate, focus group discussions (FGDs) and in-depth interviews were conducted in April of 2018 in Basra. The key findings of the qualitative research are as follows:
  - a. Lack of access to reliable electricity service negatively affects income levels of women engaged in economic activities and hampers women's ability to engage in income-generating activities. According to the qualitative assessment results, unreliable electricity service negatively impacts productivity and income of women-owned businesses. Women business owners reported reduced work hours and profits, and loss of customers due to frequent daily electricity outages. Women business owners also stated incurring additional financial burden to purchase alternative energy sources, such as generators. Household is often the center of income-generating activities for

<sup>&</sup>lt;sup>7</sup> World Bank. 2017. "Iraq Systematic Country Diagnostic."

<sup>&</sup>lt;sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> World Bank. 2018. "Middle East and North Africa Region Country Gender Scorecards, Iraq."

<sup>&</sup>lt;sup>10</sup> World Bank. 2017. "Iraq Systematic Country Diagnostic."

<sup>&</sup>lt;sup>11</sup> World Bank. 2017. "Iraq Systematic Country Diagnostic."

<sup>&</sup>lt;sup>12</sup> Republic of Iraq, "The Iraq Family Health Survey (IFHS) 2006/7," 2008.

http://www.who.int/mediacentre/news/releases/2008/pr02/2008\_iraq\_family\_health\_

<sup>&</sup>lt;sup>13</sup> World Bank. *Forthcoming*. "Middle East and North Africa Regional Gender Action Plan FY18-21 (Draft for Discussion)."

women in Iraq. Iraqi women engage in sewing, cooking, and handcrafting, and access to reliable electricity services is crucial for performing these activities. Women who engage in these incomegenerating activities reported loss of income, and in some cases, inability to continue performing these activities. Poor electricity service also negatively affects the ability of women to learn new skills and generate income. During the qualitative research, women who are economically inactive expressed interest in learning new skills, such as sewing, however, due to unreliable electricity service, women were unable to complete training courses, as they could not use the necessary electric equipment. Lack of electric appliance ownership is also mentioned as a barrier limiting women's ability to engage in income-earning opportunities. However, women participants indicated that even if they could purchase the necessary electric equipment by borrowing money, they would not be able to make enough income through these activities due to power outages. These women pointed out that they gave up trying to engage in such economic activities. The qualitative assessment also found that women who work outside of the home, such as female public employees, work longer hours as they wait for electricity service to be available to complete their work.

- b. Female-headed households (FHHs) are found to be particularly vulnerable. FHHs in Iraq constitute 10 percent of the population, and they include households headed by females who are widowed, divorced, separated, or caring for sick spouses. Owing to political instability and armed conflict, the number of widows and divorced women increased reaching nearly 2 million. FHHs who participated in the qualitative assessment, indicated that they used to rely on social assistance payments, which are currently suspended due to changing social assistance targeting. FHHs emphasized that unreliable electricity service and lack of ownership of electric appliances are major barriers in their ability to generate income.
- c. Poor electricity service also increases women's drudgery and negatively impacts their health outcomes. Most of the female qualitative research participants emphasized that they are primarily responsible for household work and caregiving activities. Middle-income Iraqi women own various electric appliances to perform various household tasks. Owing to power outages, this group of women mentioned that they manually perform these tasks, which increases the time they spend on these tasks and impacts their physical well-being. Women participants also mentioned staying up late to have electricity access and use electric appliances to perform household tasks, which takes a toll on their physical well-being. Low-income Iraqi women emphasized that during summer months they perform household duties, such as cooking using LPG without air conditioning, and excessive heat negatively impacts their health. Women respondents reported experiencing skin diseases during summer months due to lack of cooling and daily power outages.
- d. *Electricity service reliability and quality problems also impact women's sense of security and safety and contribute to increased risk of forms of gender-based violence (GBV).* GBV in Iraq is one of the main barriers preventing women's full economic, political and social participation. According to a 2006 study, one in five women in Iraq experienced intimate partner violence, and the rate is likely to have increased due to political instability and armed conflict. During the qualitative assessment, nearly all women participants expressed increased sense of insecurity due to unreliable electricity service, particularly in public spaces. Women respondents mentioned increased sexual harassment incidents due to power outages and lack of street lighting. They also emphasized experiencing limited mobility due to lack of street lighting. Even when they stay inside their homes, women also experience increased sense of insecurity during power outages due to housebreak-ins and theft. Women respondents also mentioned that unreliable electricity service and lack of air conditioning cause tensions within the households and increases incidents
of domestic violence.

- e. Unreliable electricity impacts women's ability to engage in educational activities. Female university students participated in the qualitative assessment indicated that unreliable electricity impacts their educational activities, such as their ability to use computers to complete their assignments. Different from their male counterparts, female university students also help in household chores, which limits the time they can spend on educational activities. Additionally, female university students experience limited mobility and are unable to travel to places with generators to study in the evenings. Female students emphasized delaying their assignments or using mobile phones for lighting. In addition to engaging in educational activities, unreliable electricity service also limits women's access to information. Women participants mentioned limited ability to use TVs, radios or mobile phones to access news and information.
- f. *Illegal electricity use is widespread among low-income women*. Despite the sensitivity of the topic, more than half of low-income female research participants conceded that they do not have meters installed at their homes, and therefore, they use illegal electricity. Illegal electricity is particularly common in slums mainly populated by internally displaced people (IDPs). In slum areas, households have multiple connections to electricity grids in different towns to ensure continuous electricity access. Research participants indicated that they resorted to illegal electricity due to their inability to afford electricity bills and their dissatisfaction with poor electricity service.
- g. Women lack information about energy efficiency measures and electricity bill payment options. Some low-income women participants, including FHHs and economically inactive women who used to rely on social assistance, are granted the option of paying their overdue bills in installments. However, research participants from this group of women lacked information about how this payment system works. Research participants indicated that their overdue bills are forgiven and they did not seem to be aware of their responsibility to pay their bills and potential consequences.
- 3. Gender Actions. Proposed gender actions will contribute to closing gender gaps identified in the qualitative assessment in the following areas: (i) women's ability to engage in educational activities and their health outcomes; (ii) income levels of women engaged in economic activities, including women-owned businesses; (iii) women's ability to engage in income generating activities; and (iv) women's voice and agency in the context of women's access to information and their ability to make decisions about their own lives and act on information provided to achieve desired outcomes. The project will close these gaps by:
- e. Providing improved electricity service and regularly monitoring impacts of service improvements on: (i) women's ability to engage in economic activities, (ii) income levels of women engaged in economic activities, including women-owned businesses; (iii) female students' ability to engage in educational activities, and (iv) women's health outcomes;
- f. Increasing women's information and awareness on energy efficiency, user rights and responsibilities concerning electricity service (e.g. impacts of nonpayment on service quality, bill payment options) by engaging women groups to conduct communication and awareness raising campaigns;
- g. Addressing electricity affordability concerns of vulnerable women groups, including femaleheaded households and IDP women while incentivizing legal connections by providing appropriate bill payment options;
- h. As part of skills re-development strategy in the SEDD, the project will also explore opportunities

to build capacity on gender by: (i) reviewing current training plans and recommending genderrelated content, and (ii) providing training on gender-related issues and relevance in the workplace. The project will also assess barriers that limit career progression of women employees, and design mentoring, coaching, and capacity building activities to support women employees' career development.

# 4. Gender Indicators.

- 1. Number of project beneficiaries reported improvements in electricity service, of which female (percent);
- m. of which female-headed households (percent);
- n. Number of female-headed households provided with incentives (i.e. appropriate bill payment options) and gained access to formal electricity service;
- o. Number of IDP women provided incentives (i.e. appropriate bill payment options) and gained access to formal electricity service;
- p. Number of women reported engaging in income-generating activities due to improvements in electricity service;
- q. Number of women who engaged in income-generating activities reported increased income and productivity due to improvements in electricity service;
- r. of which women-owned businesses (percent);
- s. Number of women reported improved health outcomes (i.e. reduction of skin diseases) due to improvements in electricity service;
- t. Number of women employed to conduct communication and awareness raising campaigns with women on energy efficiency, user rights and responsibilities concerning electricity service, impacts of illegal connections on service quality, and bill payment options;
- u. Number of women with increased understanding on energy efficiency, user rights and responsibilities concerning electricity service (e.g. impacts of nonpayment on service quality, bill payment options);
- v. Number of female employees working in the electricity directorate reported increased capacity and skills development.

Gender Action and Implementation Plan					
Identified Gender Gaps	Gender Actions	Notes	<b>Responsible Party</b>	Cost	
Component 1 – 7	Transmission Network R	einforcement			
Gaps in participation in economic activities and in income levels between women and men	Enhancing women's ability to engage in income- generating activities and improving income levels of women engaged in income- generating activities, including women-owned businesses, by improving electricity service delivery.	<ul> <li>Improving electricity service delivery will be implemented under the project.</li> <li>Socio-economic and gender monitoring survey will monitor: (i) number of women reported engaging in income- generating activities; (ii) number of women who engaged in income- generating activities reported increased income levels; and (out of which women-owned businesses).</li> <li>MENAGEN Team will develop a ToR for the firm that will be contracted to conduct socio-economic and gender monitoring survey.</li> </ul>	<ul> <li>WB Task Team and MENAGEN Team</li> <li>A firm will be hired to conduct baseline and follow-up socio- economic and gender monitoring surveys.</li> </ul>	<ul> <li>Survey is estimated to cost \$20- 40k, and MENAGEN Program will co- finance baseline and follow-up socio-economic and gender monitoring surveys.<sup>14</sup></li> <li>MENAGEN Team staff time</li> </ul>	
Women's health outcomes	• Improving women's health outcomes by improving	<ul> <li>Improving electricity service delivery will be implemented under the project.</li> <li>Socio-economic and gender monitoring surveys will monitor number of women</li> </ul>	<ul> <li>WB Task Team and MENAGEN Team</li> <li>A firm will be hired to conduct baseline and follow-up socio-</li> </ul>	• See above	

<sup>14</sup> MENAGEN Program implementation duration is until May 2020 and, therefore, it will only co-finance baseline and follow-up socio-economic and gender monitoring surveys before project MTR.

Component 2 – J	electricity service delivery. <b>Distribution Network Re</b>	<ul> <li>reported improved health outcomes due to improvements in electricity service.</li> <li>MENAGEN Team will develop a ToR for the firm that will be contracted to conduct baseline and follow-up socio- economic and gender monitoring survey.</li> </ul>	economic and gender monitoring surveys.	
Vulnerable women groups' access to formal electricity service	<ul> <li>Address electricity affordability concerns of vulnerable women groups, including FHHs and IDP women while incentivizing legal connections by providing appropriate bill payment options.</li> <li>Monitor number of female-headed households and IDP women provided with incentives (i.e. appropriate bill payment options) and gained access to formal electricity service.</li> </ul>	<ul> <li>Collaborate with Social Protection Directorate to identify and target FHHs and IDP women.</li> <li>Collaborate with the South Electricity Distribution Directorate and the Social Protection Directorate to determine payment options that could be provided to FHHs and IDP women.</li> <li>Socio-economic and gender monitoring surveys will monitor the number of FHHs and IDP women accessing formal connections.</li> </ul>	<ul> <li>WB Task Team and MENAGEN Team</li> <li>The South Electricity Distribution Directorate staff</li> <li>A firm will be hired to conduct baseline and follow-up socio- economic and gender monitoring surveys.</li> </ul>	See above
Component 3 – I	rechnical Assistance and	Auvisory Services; Regulatory Reforms; Ins	Sututional Capacity Building and Proj	ect implementation

Gaps in participation in economic activities and in income levels between women and men.	• Provide capacity building and skills development training to support women employees' career development in the South Electricity Distribution Directorate.	<ul> <li>This action will be part of project's institutional capacity building activities.</li> <li>MENAGEN Program will support identifying barriers that limit career progression of women employees in the South Electricity Distribution Directorate, and design particular mentoring, coaching, and capacity building activities to support women employees' career development.</li> <li>MENAGEN Program will develop a ToR for a firm or local consultant to conduct capacity building and skills development activities.</li> </ul>	<ul> <li>The South Electricity Distribution Directorate staff responsible for institutional capacity building activities.</li> <li>MENAGEN Team will ensure that institutional capacity building activities are gender- sensitive and will integrate targeted learning activities for female employees in the ToR of the firm/consultant who will implement institutional capacity building activities.</li> <li>Support of a local consultant and/or firm.</li> </ul>	<ul> <li>Targeted capacity building and skills development activities for female employees will be covered under the project's budget for institutional capacity building activities.</li> <li>MENAGEN Team staff time</li> </ul>
Women's lack of information on electricity service delivery, user rights and responsibilities , and bill payment options.	• Conduct communication and awareness raising campaigns with women on energy efficiency, user rights and responsibilities concerning electricity service (e.g. impacts of nonpayment on service quality, bill payment options).	<ul> <li>Collaborate with the South Electricity Distribution Directorate in developing messages around user rights and responsibilities concerning electricity service.</li> <li>A firm will be hired to conduct communication and awareness raising campaigns. Firm will hire women employees to conduct the campaigns. This could be integrated under the project's wider communication and awareness raising activities.</li> </ul>	<ul> <li>The South Electricity Distribution Directorate staff</li> <li>MENAGEN Team could draft ToR for a firm or integrate gender-sensitive messages under the project's wider communication and awareness arising activates and supervise the implementation of communication and awareness raising campaigns.</li> <li>Firm contracted will also monitor increased level of awareness on energy efficiency and user rights and responsibilities (i.e. impacts</li> </ul>	<ul> <li>Project budget for communication and awareness raising activities.</li> <li>MENAGEN Team staff time</li> </ul>

				of nonpayment on service quality, bill payment options) concerning electricity service.		
Gaps in participation in economic activities and in income levels between women and men	<ul> <li>Provide         <ul> <li>employment             opportunities to             women in             implementing             communication and             awareness activities             on energy             efficiency, user             rights and             responsibilities             concerning             electricity service             (e.g. bill payment).</li> </ul> </li> </ul>	• A firm that will be hired to conduct communication and awareness raising campaigns will hire women employees to conduct the campaigns	•	MENAGEN Team will ensure that the firm hired will employ women employees to conduct communication and awareness raising activities and monitor the number of women employed.	•	MENAGEN Team staff time

# Annex 2: Environmental & Social Screening Criteria/Checklists

# Objective

To determine the WB safeguard instruments for each sub-project

## In order to achieve the above, the screening process follows two stages:

- Stage 1: Criteria/Checklist 1 Category A Checklist. The objective of this Checklist, is to identify projects which would have highly significant and sensitive ES impacts (WB OP 4.01 Category A) and exclude them from the project.
- Stage 2: Screen the sub-project against Criteria/Checklist 1– Detailed Impact Assessment Checklist, in order to assess the level of significance of potential ES impacts, determine the WB safeguard instruments needed (Monitoring ESMP Checklist, Site-specific ESMP, Site-specific ESIA)
- **Stage 3**: Identify if the sub-project will trigger OP 4.12, and determine the WB instruments needed (RPF and RAP).

**Stage 1: Criteria/Checklist 1 – Category A Checklist (to identify projects with high ES impacts)** If any of the answers to the questions below is **Yes**, then the sub-project would be classified as WB Category A and should be excluded from the project.

Sub-project title:				
Sub-project brief description:				
Question	Answer (Yes/No)			
Will the project:				
1. Cause sensitive (direct and or cumulative) impacts?				
Examples of Sensitive impacts are those, which may be irreversible, or				
those which raise issues related to natural habitats and or physical cultural				
resources.				
2. Cause diverse (direct and or cumulative) impacts? Diverse				
impacts are those impacting different media (air quality, water quality,				
noise level, risk to the community) at the same time.				
3. Cause unprecedented impacts?				
Unprecedented impacts are those, which have not been experienced				
before in the project's area of influence (i.e. those which occur for the				
first time in the area)				
4. Have an area of influence that significantly exceeds its footprint?				
5. Cause significant residual impacts?				

# Stage 2: Criteria/Checklist 2 - Detailed Impact Assessment Checklist

- If the answer is **YES** to any of the questions, then a **site-specific ESMP** or a **site-specific ESIA** shall be prepared for the sub-project (The site-specific ESIA should be prepared for sub-projects involving a relatively large area of influence, i.e. transmission lines).
- If the answer is "**No**" to all questions, then the simple monitoring ESMP checklist could be used.

Question			Other categories affected
	Water (quality and resources)	·	
W1	Is the sub-project adjacent to waterways?		
W2	Will the sub-project generate solid waste?		
W3	Will the sub-project generate liquid waste?		
W4	Will the sub-project generate demolition waste?		
W5	Will the sub-project generate hazardous waste (grease, oil, empty paint containers, etc)?		
W6	Will the sub-project consume an amount of potable water higher than $3m^3$ /site/day		
W7	Will the project cause interruption to water flows?		
	Air (Quality and Noise level)		
A1	Will the sub-project use of chemicals, corrosives, and solvents?		
A2	Will the sub-project use machinery?		
A3	Will the sub-project involve refurbishment works (marble, concrete, ceramics, wood, etc)?		
A4	Will the sub-project activities generate volatile OrganicCompounds VOCs (paints, asphalt heating, preparationand application, etc)?		
A5	Will the sub-project involve major and/or minor demolition works?		
A6	Will the sub-project involve Asbestos management?		
A7	Will the sub-project involve the installation of air conditioning units/systems?		
A8	Will the sub-project involve waste burning?		
A9	Will the sub-project involve Generation of odors?		
	Soil (quality and erosion)		

Questi	Dn	Answer (Yes/No)	Other categories affected
<b>S</b> 1	Will the sub-project cause soil erosion?		
S2	Will the sub-project cause topsoil loss?		
<b>S</b> 3	Will the sub-project involve soil compaction?		
S4	Will the sub-project involve concrete		
	foundations/impervious layers?		
S5	Will the sub-project involve equipment on-site fueling and storage?		
<b>S</b> 6	Does the sub-project involve significant excavations		
	and/or movement of earth?		
	Social impacts and community health & safety		•
CHS1	Will the sub-project involve temporary labor influx (more		
	than 20 workers)?		
CHS2	2 Will the sub-project cause traffic impacts and accessibility		
	issues?		
CHS3	Could the sub-project cause utility damage?		
CHS4	Will the sub-project affect physical integrity of weak		
	structures/houses adjacent to construction sites?		
	Occupational Health & Safety		
OHS1	Will the sub-project involve potential physical hazards?		
OHS2	Will the sub-project involve fire hazards?		
OHS3	Will the sub-project involve slippage, falling & working at		
	heights?		
OHS4	Will the sub-project involve manual handling and lifting?		
OHS5	Will the sub-project involve electrocution?		
OHS6	Will the sub-project involve excavation works?		

# Stage 3 – OP 4.12

If the answer is **YES** to any of the questions, then the sub-project will trigger OP 4.12, and the WB instruments needed (RPF or RAP) should be identified.

1. Require physical displacement of land owners/lessees/occupiers/squatters?			
2. Require permanent/temporary land acquisition?			
3. Cause loss of assets, restriction to assets, loss of income sources or means of livelihoods?			
4. Cause partial loss of income, partial damage of the land, and temporary			
restriction to assets?			

Annex 2: Resettlement Policy Framework (RPF)

(attached document)

# Annex 4: Environmental and Social Management Plan (ESMP) Outline

Any sub-project ESMP would have the following format:

#### 1. Project Description

2. Description of Adverse Impacts: The anticipated impacts are identified and summarized.

3. **Description of Mitigation Measures:** Each measure is described with reference to the effects it is intended to deal with. As needed, detailed plans, designs, equipment description, and operating procedures are described.

4. **Mitigation Indicators and Description of Monitoring Program:** Monitoring provides information on the occurrence of impacts. It helps identify how well mitigation measures are working, and where better mitigation may be needed. The monitoring program should identify what information will be collected, how, where and how often. It should also indicate at what level of effect there would be a need for further mitigation. How environmental impacts are monitored is discussed below.

5. **Monitoring methods:** Methods for monitoring the implementation of mitigation measures or environmental impacts should be as simple as possible, consistent with collecting useful information, so that the sub project implementer can apply them. For instance, they could just be regular observations of the sub project activities or sites during construction and then when in use. Are plant/equipment being maintained and damages repaired, does a water source look muddier/cloudier different than it should, if so, why and where is the potential source of contamination. Most observations of inappropriate behavior or adverse impacts should lead to common sense solutions. In some case, e.g. transgenic crops, there may be need to require investigation by a technically qualified person.

6. **Responsibilities:** The people, groups, or organizations that will carry out the mitigation and monitoring activities are defined, as well as to whom they report and are responsible. There may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies.

7. **Implementation Schedule:** The timing, frequency and duration of mitigation measure and monitoring are specified in an implementation schedule, and linked to the overall sub project schedule.

8. **Capacity Development and Training:** If necessary, the ESMP can recommend specific, targeted training for project staff, contractor, and community groups to ensure the implementation of environmental safeguards recommendations.

9. Cost Estimates and Source of Funds: These are specified for the mitigation and monitoring activities as a sub project is implemented.

10. **Integration:** The ESMP must be integrated into the sub-project's plan and design, budget, specifications, estimated costs, bid documents, and contract/agreements clauses.

Contract documents should only be finalized when site-specific ESMP recommendations are adequately and appropriately incorporated into the plan and design, cost estimates, specifications, and contract clauses.

# Annex 5: Environmental & Social Management Plan (ESMP) Sub-project Simple Monitoring Checklist

Simple ESMP Monitoring Checklist to be used by the Contractor and the Supervising Engineering Consultant (SEC) during construction phase Is included as an attached document.

# **Annex 5: Consultation Summary Note**

#### **ESMF & RPF Consultation**

Conducting a public consultation was not feasible at the time of preparing this ESMF due to security concerns, protests as well as current in general unstable conditions. However, the project's team managed to hold a consultation session with the Vice-President of the Transmission project's team Eng. Ali Nasser Khodeir and members of the team at the Transmission Department of the Ministry of Electricity on May 3<sup>rd</sup> 2018. The objective of this session has been to present the objectives of the ESMF and obtain more info about the roles and responsibilities of the PMT, land tenure, environmental laws, land acquisition, among others. The session started with a PowerPoint presentation on the ESMF study including a description of the ESIA process, difference between project-specific ESIA, project-specific ESMP and ESMF, projects screening process, potential negative impacts and their mitigation measures.

During the introductory session, the attendees were informed with the importance that they clearly state their opinions and identify any impacts/risks that the project's team may have omitted. It was also clearly stated that their opinions will be taken into consideration and the ESMF Study will be modified accordingly where applicable.

President	Eng. Zeyad Ali Fadel
Vice-president	Eng. Ali Nasser Khodeir
Team Management Supervisor& Technical Coordinator	Eng Taleb Gassem Hamid
Coordination team:	Eng Raed Abdel Kereem Nishan
	Zeinab Omran Moussa
	Adel Abdallah Abdel Mohssein
	Saad Abdel Samad Ghadban
Procurement team	Emad Abadi Abdel Razek
	Nadia Kazem Marzouk
	Hamid Mohid nagima
	Hazem Mohamed Shawkat
Planning team	Eng. Maissoun Abd-Allah Abd El Hussein
	KarimGomaa Horeiz
	Moslem Hassan Qassem
Financial team	Kheir Allah Taha Gabr
	Adel Badr Mehana
	Mahdi Abdel Hossein
	Mohamed Ammar Khalil Samer

The PMT members as well as their roles are listed below:

Operation team	Eng. Mohannad Feissal Abd Daei Abdel Hakim Safi Maissam Nazem Belam
Lines team	Eng. Saleh Baqer Mohssein Eng. Ali Zoheir Karim Eng. Ahmed Ganem Gdouh
Stations team	Eng. Abdel Amir Mohssein Goed Eng. Hussein Mahdi Eng. Ahmed Gabbar Afati Eng. Dred Ahmed Neama
Transformers team	Eng. Bassem Ebid Saleh Wael Yasser Abd Khaled Hamid Aboud
Environmental &Social team	Eng. Hazem Lafta Khamis Ragaa Sogeil Shamal Diaa Abd Ali Ramadan

Points of discussion and consultation outputs

Following the presentation, a discussion was carried out which focused on the following topics:

- Technical standards and codes of the Ministry of Electricity.
- Adopted procedures for obtaining the permits
- Final list of the sub-projects
- Iraqi environmental laws and policies
- Land acquisition and compensation

The session was concluded that the study has covered all key impacts and the team stressed upon the urgency to finalize the study and proceed with project's implementation. The team has also point at the fact the project's preparation phase has taken longer than expected.

With regards to potential impacts related to land acquisition, the team has clarified the fact that in order to be able to construct the transmission line, a number of permits have to be issued first form a number of ministries including the Ministry of Agriculture, Ministry of Environment, Ministry of Housing & Construction and ministry of water resources. Another important fact has been highlighted which is that the new transmission lines will follow the same route as the old existing ones.

The team has also stressed the difficulties of holding a public consultation especially that the electricity problem is very sensitive in Basra.

# Guidelines for Public Consultation for project-specific ESIAs

## Scope of Public Consultation

The involvement of the public and concerned entities in the ESIA planning and implementation phases is mandatory for Category B projects funded by the Bank. Since public consultation is undertaken with the ESIA process, it is a consultation undertaken mainly on the environmental and social aspects related to the project. It is important to clarify in the consultation meetings that this consultation does not include the political or economic aspects or any other aspects not to be addressed in the ESIA.

The aim of the consultation process is to provide the concerned and/or interested parties with the following:

- The opportunity to report their opinion in the mitigation measures proposed to minimize potential negative environmental and social impacts;
- Strengthen social acceptance of the project; and
- Inform the concerned parties that the environmental and social impacts will be minimized to levels that are low as reasonably practical and achieve the balance between legitimate requirements for development and environmental protection.

#### *The concerned and/or affected parties of the project include, as a minimum:*

- Relevant ministries including Ministry of Environment, Ministry of health, Ministry
- Competent administrative authorities, indicated as per the project location and nature
- Representatives of the Basra, Al-Muthana, Dhi Qar, and Missan governorates
- Representative from affected communities such as neighboring facilities, people living near the project. This is related to the project location, type and resulting impacts)
- Local universities and research centers
- Local NGOs interested in environment
- Other concerned parties

Consultation is undertaken twice during the ESIA process the first during the phase of identifying the scope of the project's ESIA, and the second is after the preparation of the draft ESIA.

# Methodology of Public Consultation

#### Preparation of the Public Consultation Plan before Starting

Before starting the consultation activities in the ESIA scoping phase, a plan should be prepared indicating the methodology of the public consultation to be adopted in the two phases (Scoping phase and consultation on the draft ESIA). The plan should indicate the concerned parties that will be consulted, method of consultation, venue, advertising and invitation method. The plan is to be prepared in accordance to the following:

Public Consultation during ESIA Scoping

## **Objective of the Consultation in this Phase**

The consultation during the scoping phase aims to agree on the aspects and impacts that will be addressed and analyzed in the ESIA study, according to the nature of the project and the surrounding environment and sensitive receptors. During this phase, it is important to involve the project affected/interested parties in indicating these aspects and impacts and seek their opinion in these potential impacts to ensure that all potential aspects have been addressed in the study.

## Method of Consultation

Consultation in this phase should be undertaken through different forms:

Meetings could be held with each affected/interested party, individually. This is done with representative (s) of the affected/interested party, to be delegated by the party. It is worth noting that the PMU should be responsible for contacting the concerned parties and arrange for the meeting. The concerned party should indicate the suitable timing for the meeting and should delegate its representative.

An Alternative could be to conduct a unified meeting where all concerned parties are invited to attend. The PMU should be responsible for inviting the concerned parties

In both cases, the PMU/Consultant in charge of preparing the study should provide a non-technical Executive Summary in Arabic language and makes it available on the Ministry's/project's website two weeks at least prior to the session. The consultation should be advertised in a way, which ensures that affected/interested parties are well aware of the consultation and have sufficient time to prepare for it. An example of a suitable advertising method would be to publish an Advertisement in a local newspaper and/or to use social media accessible to the public. In cases where land will need to be temporarily or permanently acquired, land owners shall be invited to the consultation session.

During the session, the following represent the minimum information which should be presented:

- Project components and the description and activities of each component
- Summary of the project's location features.
- Project's identified potential environmental and social aspects.
- Commitment of the project owner towards improving the environmental status in the surrounding area and to support the neighboring community
- Other aspects to be addressed in the study according to the attendees' opinions and recommendations.

The presentation should be clear and understandable and in local language, this could involve visual aids and illustrative drawings.

#### **Points of Discussion and Consultation Outputs**

The presented information should be discussed to yield:

- Opinion of the concerned parties in the presented environmental and social aspects in order to take

them into account and if there is a need to address additional aspects

Indicate additional concerned parties to be consulted

## Second Consultation session on the Draft ESIA Report

#### **Objectives of the second consultation session**

After the draft ESIA is prepared and before the submittal of the study for the WB approval, consultation should be undertaken on the study to disclose its results and provide the affected/interested parties with the opportunity to be reassured that points indicated during the scoping session/meetings have been addressed in the study and to be comfortable with the mitigation measures to which the project's proponent is committed.

#### Method of Consultation

A unified meeting should be held (hearing session). The meeting should be attended by representatives of all concerned parties, and as a minimum those who have participated in the scoping meetings. It is important to provide enough time for the participants before the meeting to review the study results and provide their comments through providing them with the executive summary of the study in Arabic two weeks in advance of the public consultation meeting. The meeting should be publicized also at least 2 weeks before the meeting. The meeting should be held in a venue that is accessible to participants. It is the responsibility of the concerned parties to delegate representatives to attend the meeting. Similar to the scoping session, it should be advertised for via a suitable method.

During the session, the following represent the minimum information which should be presented:

- Results of the study while referring to the points raised by the concerned parties in the ESIA scoping phase
- Presentation of the mitigation measures to which the project proponent is committed in order for the negative impacts to reach levels which are as low as reasonably practical.

#### **Points of Discussion and Consultation Outputs**

Not less than one third of the meeting, should be dedicated to discussion. Discussion should include what was presented and the concerned parties will have the right to discuss the mitigation measures to be reassured of the project from the environmental point of view. It is key at the beginning of the session to clearly communicate to the attendees their rights to state their opinions and recommendations and that they will be taken into account in the final study.

## Documentation of the Consultation Results for both sessions

The following key issues related to public consultation should be included as an integral part of the ESIA report:

- As an individual chapter: An individual chapter in the ESIA should be prepared for public consultation including:
  - Advertisement method, venue and date.
  - Methodologies used to inform and involve concerned parties in the ESIA process
  - Analysis of the data and information gathered and feedback acquired.
  - Table with all aspects that have been discussed during the public consultation meetings and how the project will address or mitigate the aspects
  - Methodologies followed by the project proponent to ensure the continuity of the consultation process during the construction and, operation phases and until the project reaches the closure phase.
  - Commitments of the project owner to improve surrounding environment and support the neighboring community
  - Photo-shoots of the attendees and the activities performed.
- As an annex: Documentation of public meetings and meetings including dates, name of attendees as well as agenda and topics of discussion.

## **Requirement and Scope of the Public Disclosure**

Disclosure of relevant material is an important process and should be undertaken in a timely manner This process permits meaningful consultations between the project proponent and project-affected groups and local NGOs is required to take place.

Before the public consultation on the draft ESIA, the draft technical summary in Arabic should be disclosed to all concerned parties. After the ESIA process is complete, the ESIA report will be available at the Ministry of Electricity's as well as the WB's website.