

Environmental and Social Data Sheet

Overview

Project Name:	FAYOUM WASTEWATER EXPANSION PROJECT
Project Number:	2016-0835
Country:	Egypt
Project Description:	Investment loan for the construction and expansion of wastewater collection and treatment facilities in the vicinity of Lake Qarun (Fayoum Governorate). The programme will be implemented in two phases.
EIA required:	yes
The project will be subject to different EIAs studies for the proposed WWTPs, pump stations and sewer networks according to the national laws and regulations.	
Project included in Carbon Footprint Exercise ¹ :	yes

Environmental and Social Assessment

Environmental Assessment

Centralised household sanitation coverage is relatively low in Fayoum Governorate (around 45% and covering mainly urban areas) with the remainder of households using septic tanks that are often badly maintained or non-existent. The Project is expected to have substantial environmental and social benefits as it addresses the lack of adequate sanitary infrastructure in the rural areas of Fayoum that significantly contributes to the pollution of Lake Qarun, one of Egypt's important natural landmarks with significant historical, natural and scientific importance. The Project will provide much needed employment for skilled and unskilled workers in the region, mainly during implementation but also during operation.

The Promoter for this project is the Holding Company for Water and Wastewater (HCWW), with the Beneficiary being Fayoum Company for Water and Wastewater (FAYC), a regional subsidiary of HCWW.

An Environmental and Social Audit, carried out as part of the feasibility study, identified weaknesses with FAYC's organisation relating to its environmental and social capacity such as the absence of a dedicated environment department and an environmental management system. These weaknesses will be addressed by the project with the support of an international Project Implementation Consultant (PIC) who will also be responsible for the preparation of the ESIs for the Project and for capacity building within FAYC. All environmental and social requirements of the Project have been identified in the Project's Environmental and Social Action Plan (ESAP).

¹ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO₂e/year absolute (gross) or 20,000 tons CO₂e/year relative (net) – both increases and savings.

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The Project will comply with national environmental requirements as defined in Egyptian Law 4/1994 and its executive regulations (ERs) as amended by Law 9/2009 and Decree 1095/2011. The Law dictates that Environmental Impact Assessment (EIA) studies are mandatory for both new projects and/or expansion of existing projects as a part of the licensing procedure.

Given the early stages of the Project, there are currently no ESIA studies for the various components of the Project. ESIA studies will be developed according to the Guidelines of Principles and Procedures for Environmental Impact Assessment issued by the Egyptian Environmental Affairs Agency (EEAA) in 1996 and amended in 2009. The approach adopted in the EEAA 2009 EIA Guidelines for the classification of projects, is, overall, considered compatible with the EU EIA Directive² as it reflects the increasing levels of detail required in environmental impact assessment, depending on the severity of potential impacts. All environmental and social impacts will be addressed in accordance with Egypt's national regulations and to the satisfaction of the Bank through the Project's ESIA's and specific Environmental and Social Management Plans (ESMPs). Completion of the corresponding ESIA, to the satisfaction of the Bank, will be a condition prior to any disbursement relating to the works.

It is noted that in accordance with the "Protocol for Cooperation between the Ministry of Environment and the Ministry of Housing, Utilities, and Urban Communities for the Application of Criteria and Environmental Conditions for Wastewater Projects", sanitation projects are classified as category B projects (i.e. of medium severity impacts that can be directly mitigated).

The typical project activities will involve clearing of construction sites from obstacles, excavation of trenches, laying of sewers, construction of concrete structures and installation of electromechanical equipment. Possible negative environmental impacts are limited to the construction period and include land disturbance, air pollution due to dust generation, noise, generation of construction waste and ecosystem disturbance due to excavations. These impacts are expected to be temporary and confined to the immediate construction sites. These issues will be addressed in the relevant ESMPs. The Project is unlikely to result in any lasting loss of flora and fauna. It is foreseen that there will be some permanent loss of agricultural land at but this is not expected to be significant. The Project will not affect any protected areas.

The Project will also contribute to climate change mitigation by reducing greenhouse gas (GHG) emissions through the treatment of wastewater.

The scope of the Project is fully in line with the Bank's Water Sector Lending policy and contributes to the achievement of Sustainable Development Goal No.6 (SDG) of "*availability and sustainable management of water and sanitation for all*", particularly in the rural low income areas.

EIB Carbon Footprint Exercise

Individual onsite septic systems used for the management of domestic wastewater, such as the ones currently in use by the majority of Fayoum's population, emit significant amounts of GHGs including methane, carbon dioxide, and nitrous oxide. Replacing these septic systems with wastewater treatment plants (WWTPs) results in a net reduction of GHG emissions,

² According to the EU EIA Directive, the project falls under Annex II.

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although the operation of WWTPS also results in direct emissions of GHGs from the biological processes as well as indirect emissions from energy generation.

GHG emissions generated currently by the population targeted by the Project amount to approximately 170,000 tonnes of CO₂ equivalent per year; however, once this number of people has access to centralised wastewater treatment, the GHG emissions would reduce to approximately 63,000 tonnes of CO₂ equivalent per year (taking into account direct and indirect emissions).

As a result, the Project will contribute to an overall reduction in GHG emissions of 107,000 tonnes of CO₂ equivalent per year.

For the annual accounting purposes of the EIB Carbon Footprint, the Project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of Project cost.

Social Assessment, where applicable

The Environmental and Social Audit, carried out as part of the feasibility study, concluded that the construction of proposed wastewater infrastructure is not foreseen to involve involuntary resettlement. It is noted that:

- Local Councils are involved in the process of selecting the most appropriate routing of the sewerage networks and the siting of wastewater treatment facilities, in an effort to address in advance: (a) any reactions to the project's implementation and (b) any issues related to land availability for the construction of foreseen infrastructure (i.e. routes of mains, pumping stations expansions of existing and new WWTP).
- The land required for the construction of WWTPs expansion or new WWTPs, if other than state property, will be purchased following mutual agreement between the Promoter and the individual owners.

Land acquisition is ruled by the Egyptian Law 10/1990, which regulates land acquisition for public interest projects. Any eventual economic or physical resettlement identified will be carried out in line with EIB standards

With regard to labour standards, Egypt has ratified all eight fundamental ILO Conventions and the Project will comply with national labour, social security and occupational health and safety laws and the fundamental principles and standards embodied in the ILO Conventions.

Public Consultation and Stakeholder Engagement

A Stakeholder Engagement Framework (SEF) has been prepared as part of the Project's feasibility study. Public consultation is foreseen as part of the EIA process as defined in the Guidelines of Principles and Procedures for Environmental Impact Assessment issued by the Egyptian Environmental Affairs Agency (EEAA) in 1996 and amended in 2009.

Conclusions and Recommendations

The environmental and social benefits resulting from the implementation of the proposed wastewater investments, particularly the reduction of pollution in drains and the Lake Qarun, will lead to the significant improvement of public health conditions and living standards for the local population. In addition, the potential stimulation of economic activities (such as agriculture, fishing and tourism) that are currently adversely affected by the increased levels of pollution attributed to raw domestic wastewater discharges, will provide much needed

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employment for skilled and unskilled workers in the region and would contribute to easing the country's unemployment burden.

The Project is not expected to have any significant adverse impact on the environment, with possible negative environmental effects being temporary and confined to the immediate construction sites. These adverse impacts can be either prevented and/or minimised through appropriate mitigation measures and by adhering to national standards and relevant international standards, guidelines and design criteria.

The Promoter is expected to comply with the requirements of the Egyptian Environment Law 4/1994 and its executive regulations (ERs) as amended by Law 9/2009 and Decree 1095/2011.

The scope of the Project is fully in line with the Bank's External Lending Mandate relating to the development of social and economic infrastructure and climate change mitigation, the Bank's Water Sector Lending policy as well as the European Neighbourhood Policy.

In order to comply with the Bank's requirements, the following conditions relating to environmental and social matters will be applied to the project:

- Full compliance with the project's Environmental and Social Action Plan (ESAP).
- The Promoter will provide the required Environmental and Social Impact Assessment (ESIA) report for each project component under disbursement, received to the satisfaction of the Bank for publication on the Bank's website.

With the above conditions in place, the project is acceptable for financing in environmental and social terms.

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