

Fayoum Wastewater Expansion Programme

Location:

Egypt

Project number:

48177

Business sector:

Municipal and environmental infrastructure

Notice type:

Public

Environmental category:

B

Target board date:

04 May 2017

Status:

Signed

PSD disclosed:

21 Feb 2017

Translated version of this PSD: [Arabic](#)

Project Description

EUR 448 million investment programme to fund an integrated wastewater treatment programme in the Fayoum Governorate, including the (i) construction of 8 new wastewater treatment plants (WWTPs); (ii) expansion of 9 existing and rehabilitation of 10 existing WWTPs; (iii) expansion of the sewerage network of about 3433 kilometers of pipes together with the installation of their 139 pumping stations; and (iv) purchase of 350 evacuation trucks to serve other remote unserved rural areas (the "Project").

EBRD will provide a sovereign loan of up to EUR 186 million to the Arab Republic of Egypt. It is expected that the Project will be co-financed by a sovereign loan of up to EUR 172 million from the European Investment Bank ("EIB") and a EUR 30 million investment grant from the EU Neighbourhood Investment Facility ("NIF"). The Project fully supports the Bank's Green Economy Transition ("GET") Approach which, among different goals, aims at scaling up the promotion of sustainability of natural resources use, to support pollution prevention and to avoid/reduce the degradation of ecosystems.

Project Objectives

- **Increasing wastewater treatment capacity:** The Project will provide access to improved sanitation services to over 940,000 people in six rural districts in Fayoum, thereby raising sanitation coverage to 86 per cent of the rural population (from a current level of 32.6 per cent).
- **Contributing to the depollution of Lake Qarun:** Lake Qarun is the third largest lake in Egypt and an important natural freshwater resource for economic activities in Fayoum. The Project will substantially contribute to reduced pollution of Lake Qarun. This will positively affect community health and key related economic opportunities in Fayoum, including fishing, fish-farming and tourism related activities.
- **Improve operational systems and practices at local level:** The Project will enhance the overall efficiency of the operations and improve the capacity and responsibility of the Fayoum Company for Water and Wastewater ("FWWC") while promoting the decentralisation of wastewater management.

Transition Impact

Moderate Good

Transition impact for this Project is expected to be derived from:

- **Contribution to green economy** by providing access to improved sanitation services to the local population through enhanced wastewater collection and treatment capacities (the Project will effectively increase the Company's actual treatment capacity by approximately 290,000 m³/day), the Project will considerably reduce the volumes of raw wastewater, and its associated pollutant loads, that will be discharged into Lake Qarun. The Project will also increase the sustainable use of water resources by unlocking the potential for water reuse in agriculture.
- **Contribution to economic inclusion** through the improvement of health outcomes and improved economic opportunities for the local population in the Fayoum Governorate which is currently affected by a lack of adequate wastewater management systems and high pollution of water in agricultural drains and in Lake Qarun.

Client Information

ARAB REPUBLIC OF EGYPT

Fayoum Company for Water and Wastewater ("FWWC")

FWWC was incorporated in 2004 during the reform of the water sector as one of the subsidiary companies of the Holding Company for Water and Wastewater ("HCWW"). It is the sole provider of piped drinking water and wastewater services in the Fayoum Governorate serving an area of approximately 1.8 thousand km² with a total population of around 3 million. The Company is responsible for operations and maintenance of the treatment plants, reserves and pumped stations in served villages. FWWC has 23

WWTPs in its jurisdiction with a total wastewater treatment capacity of ca. 272,000 m³ per day.

EBRD Finance Summary

EUR 186,000,000.00

Total Project Cost

EUR 448,000,000.00

Environmental and Social Summary

Categorised B (2014 ESP). The Project is expected to result in significant environmental, social and health benefits once operational, providing access to improved sanitation services to [CN1] 940,000 people. By Improving the quality of water discharged into agricultural drains in the Fayoum Governorate, the Project will also contribute to the mitigation of negative health effects which are related to the use of untreated wastewater for irrigation purposes and reduce the pollution load entering into Lake Qarun, a protected area, Important Bird Area (IBA) and Ramsar site. The construction and operation of the Project may, however, be associated with some environmental and social risks although these are expected to be readily addressed through the implementation of good international practices for E&S mitigation and management. While the Project is expected to serve a large rural population, none of the individual wastewater treatment plants (WWTPs) will exceed the 150 000 population equivalent threshold for category A projects. The Project is therefore categorised as B.

Environmental and Social Due Diligence (ESDD) is in well advanced but not yet completed. It is being conducted by an independent consultant as part of the feasibility study of the Project. The ESDD has included a corporate audit of FWWC's existing E&S provisions, a site audit of selected existing WWTPs subject to expansion and an environmental and social assessment of the Project. Key issues being considered include worker and community health and safety, affordability, land acquisition and impacts on livelihoods, waste management, impacts to biodiversity, in particular impacts to the Lake Qarun Protected Area and its protection objectives (in line with the EU Habitats Directive), and nuisance impacts specifically relating to noise, dust and odour.

Specific mitigation measures and management controls are being defined for the mitigation of these impacts. The Project will be required to go through a local environmental permitting process prior to implementation and this will draw on the findings of the ESDD and refine the mitigation measures to be implemented.

The Project is required to meet the requirements of the EU Urban Wastewater Treatment Directive (91/271/EEC) and therefore the ESDD and the feasibility study have considered existing WWTP performance and Project design concepts. ESDD has determined that many of the existing WWTPs are in need of rehabilitation and upgrades to improve performance and effluent quality and this will form part of the Project. New WWTPs and expansions will be designed to achieve EU standards from the outset.

The construction phase for the Project will involve a large number of contractor teams (mainly local contractors) constructing and expanding WWTPs and laying pipelines and connecting lines to individual households in sometimes very narrow and irregular village streets. Construction works are likely to result in impacts such as noise, dust, access restrictions, health and safety issues, utilities interruptions (power and drinking water) and issues related to temporary worker presence. These impacts may have disproportionate effects on some stakeholder such as women and children. The ESDD and local environmental permitting process will put in place various measures to avoid and manage these impacts as well as those associated with the operation of the Project. The ESDD is also defining a series of measures to avoid possible livelihood issues associated with construction works. The Project will be implemented with the support of a Project implementation consultant who will monitor and enforce a high level of E&S performance, provide capacity building on E&S issues to FWWC and contracting teams and ensure the development and operation of the Project in line with the Bank's requirements. This will include the development of appropriate management systems, procedures and work instructions to manage E&S and technical performance and risks during Project development and operation.

The Project is not expected to impact biodiversity although the Project will reduce pollutant loads being discharged into surface water in the area, including Lake Qarun. An overall improvement in baseline conditions is therefore expected.

Stakeholder engagement will be key for the successful implementation of the Project and therefore the ESDD includes the development of a Stakeholder Engagement Plan (SEP) and Non-Technical Summary (NTS), which will be disclosed locally by FWWC once completed and also support the planned stakeholder awareness TC. An Environmental and Social Action Plan is being developed and will be agreed with the FWWC before Board to structure the Project to meet the EBRD PRs.

Key actions are described above and will be implemented by FWWC with the support of the Project implementation consultant.

Technical Cooperation

The Project is expected to benefit from the following Technical Co-operation assignments

Pre-signing

- TC 1: Feasibility Study, which will focus on the technical, environmental and financial due diligence aspects of the Project. The estimated cost of the assignment is up to EUR 900,000, proposed to be funded by the Infrastructure Project Preparation Facility (IPPF).

Post-signing

- TC2: Corporate Development Programme, Financial and Operational Performance Improvement Plan (FOPIP), to include financial, managerial and operational

performance improvement, including procurement of a Management Information System, design and implementation of reporting standards and management training. The programme would also include the establishment of a sophisticated KPI system in line with international standards and to include a basic business plan. The estimated cost of the assignment is up to EUR 700,000, proposed to be financed by the NIF.

- TC3: Project Implementation Support to assist the PIU with Project preparation and implementation including review of the technical requirements and the procurement cycle, management and mitigation of environmental and social impacts and risks, contract management and administration, as well assistance with compliance to loan requirements (disbursement, covenants and project reporting). The estimated cost of the assignment is up to EUR 4.8 million, proposed to be financed by the NIF.
- TC4: Stakeholder Participation Programme: Awareness raising about water use and management in cooperation with civil society in Fayoum and across Egypt to assist the HCWW, FWWC and other subsidiaries in enhancing their capacity for participatory community and consumer engagement in order to improve water conservation, reduce environmental damage and address public health issues and the related loss of economic opportunities, particularly for youth and women. The estimated length of this assignment is up to 5 years and the estimated cost up to EUR 1.5 million, proposed to be financed by the NIF.
- TC5: Economic Inclusion ex-post assessment: The estimated cost of the assignment is up to EUR 75,000, to be financed by EBRD Shareholder Special Fund ("SSF") under the Inclusion Technical Assistance Framework.

Company Contact Information

Mohey El Din Ahmed Mohamed

mohey.mohamed@hcww.com.eg

00201200080088

0020224583884

www.hcww.com.eg

Cornish El-Nil, Rod-El-Farag, Water Treatment Plant, Cairo, Egypt