Luxembourg, 19 November 2013

Environmental and Social Data Sheet

Overview

Project Name:	KAFR EL SHEIKH WASTE WATER TREATMENT
Project Number:	2011 0416
Country:	Egypt
Project Description:	The project involves (i) the construction of 3 new Waste Water Treatment Plants (WWTPs); (ii) the expansion of 3 existing WWTPs; and (iii) the laying of 697 km of sewers with the installation of 52 pump stations in the the Kafr El Sheikh Governorate. The provision of rural sanitation services will contribute to improving health standards of KES residents and the environmental quality of the Nile, Lake Burullus, and the Mediterranean Sea.
EIA required:	no
Project included in Carbon Footprint Exercise[1]:	no

(Details for projects included are provided in section: “EIB Carbon Footprint Exercise”)

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

A comprehensive Environmental and Social Impact Assessment was carried out as part of the feasibility study financed by the EIB. The methodology utilized for the development of the ESIAs is in accordance with the Environmental Regulations and Standards in Egypt, as well as EU respective Regulations. The scope of the ESIA included the E&S impact of the construction and operation phase.

The overall conclusion of the ESIA is that, assuming that the temporary impacts of the proposed project will be properly managed to levels, the project will result in high environmental and social benefits. The comparative analysis of the project’s alternatives against the zero-case scenario indicated that if the project was not implemented, surface water quality in drains and irrigation canals will continue to deteriorate due to the direct discharge of untreated wastewater. Furthermore, the quantity of untreated wastewater would increase according to the anticipated population growth in the study area, thus resulting in increased pollution loads to ground, surface waters and groundwater. At the same time, sanitation and hygiene conditions would continue to degrade and result in serious health problems to the population. Finally, the target of improving water quality in Lake Burullus and subsequently the Mediterranean Sea would not be achieved.

The ESIA also assessed the social impact of the project. Negative impacts are limited to either the construction phase or limited to a small number of people as a result of unavoidable land acquisition. An Environmental and Social Management Plan will be put in place to ensure compensation in line with Bank’s social safeguard policy.

The analysis outlined here matches the scoping requirements of the relevant European Union Directives. None of the proposed projects would require a formal EIA under EIA Directive 97/11/EC and its amendment 2011/92/EU. Biodiversity and Habitat impacts have been properly considered in the ESIA. The project is therefore acceptable for Bank financing.

[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.

Environmental and Social Assessment

Environmental Assessment

To ensure compliance with the EIB environmental and social safeguards the ESIA were carried out for each district separately and modelled against the Egyptian environmental and social legislation, regulations and guidelines, as well as the respective EU Directives and regulations and the international agreements, which are of direct or indirect relevance to the project. Where appropriate, a comparative analysis of Egyptian and EU regulation was implemented to represent similarities and also to provide guidance as regards the enforcement of the most stringent environmental parameters. The ESIA studies indicated that in all cases, the residual impacts from the project during the preparation, construction and operation phases are assumed to be minor to negligible.

- The main positive environmental impacts were assessed as follows:

Surface Water Quality

The project is anticipated to significantly improve surface water quality in drains and irrigation canals in comparison to the "no project" scenario, where uncontrolled wastewater discharge leads to microbial and chemical contamination of the receiving waters, oxygen depletion, increased turbidity, and eutrophication.

Ground Water

The project is anticipated to significantly improve groundwater quality and groundwater table level through the prevention of sewerage infiltration from septic tanks and cesspits. This is consistent with the National Strategy to adapt to climate change and water scarcity, through the improvement of the quality of groundwater aquifers, as they are considered as the country's strategic resource to cope with increasing water demand (EEAA/UNDP, 2010).

Soil Quality

The project is anticipated to significantly improve the quality of soil, which is currently adversely affected by continuous pollutants releases caused by septic tanks/cesspit effluents and wastewater discharge onto streets or open ground.

Lake Burullus

By improving the quality of surface water in drains that finally discharge into the Lake, the current pollution loads fed into Burullus will be reduced and thus, the quality of water in the Lake will be significantly improved and the restoration of the aquatic ecosystems will be feasible.

- Biodiversity issues

As regards the assessment and abatement of impacts to the biological environment, the contractors will be responsible for the development of a Habitat Restoration Programme including a "Habitat Survey and Management Study" in or near habitats protection designated areas. These impacts on the biological environment are assumed long term, local, direct and irreversible, while their significance is assumed minor. Moreover, the contractors will be responsible for the development, implementation and revision of a waste management plan, which will ensure safe and sustainable waste collection, storage, transport and disposal. Regular monitoring is fully recommended to ensure compliance to standards at the project area. In this framework, the residual impact to the biological environment is assumed negligible provided that the above mitigation measures are fully applied.

EIB Carbon Footprint Exercise

N.a.

Social Assessment, where applicable

The alignment of the sewer networks and the location of the pumping stations included in the project have been planned with careful consideration to avoid significant land acquisition and involuntary resettlement impacts. The sewer networks will be constructed totally underground along public roads, so there will be no respective land acquisition along their routes. As for the pumping stations, these will be constructed with the cut-and-cover method and occupy, the smallest footprint on public or private land. This way, any resettlement impact due to the construction of the pumping stations on private land will, also, be minimized. As a result, private land acquisition is characterised as a short-term, local, direct, and irreversible impact, of moderate significance.

Nevertheless, where land acquisition is unavoidable as a necessity for the construction of pumping stations on private land, the replacement cost shall be assessed for the provided land to determine appropriate compensation to Potentially Affected Persons (PAPs), such as the affected land owners, under Egyptian Laws. The agreed compensation to these owners will be provided for the purpose of securing that their living standard and income opportunities remain at their pre-project levels. Appropriate measures to ensure land availability have already been undertaken.

Potential temporary social impacts result to be mitigated through the ESMP:

- Restricted community mobility

The contractors in close cooperation with KSWSSC should coordinate with other competent authorities for the provision of sufficient pedestrian crossing points, planning for entrances and exits for services, timely management of activities, following traffic diversion plans and disseminating information in relation to construction activities schedules. Impacts are considered short term, direct, temporary and reversible and the significance is assumed minor. Moreover, the contractors should take all necessary actions in order to minimise the duration of construction activities. In this framework, the residual impact is considered negligible after the application of mitigation measures and appropriate site management practices.

- Roads and traffic interruptions

The contractors should plan the construction activities in a manner to minimise the vehicles' itineraries and also disseminate the respective construction schedules to the affected local communities in order to normalize adverse effects, such as traffic congestions. Impacts are considered short term, direct, temporary and reversible, while the impacts' significance is assumed moderate. Moreover, the contractors, in close cooperation with KSWSSC, should coordinate with the Traffic Department of KESG to ensure smooth traffic flow at the project area. In this framework, the residual impact is assumed minor after the application of the above mitigation measures.

- Occupational and Community Health and Safety - description of key issues at regulatory and/or project level, and measures adopted/proposed follow-up

During the <u>construction phase</u>, the following considerations were developed as regards the community and occupational health and safety:

a. Community H&S

The design should specify that the construction site be surrounded with fence to prevent unauthorized access and hence prevent accidents. Visual barriers will be developed, where necessary, in addition to adequate noise attenuation measures. The development of effective emergency response plans is assumed important for safeguarding public health and safety. Impacts are considered short term, direct, local and reversible, while the significance is assumed moderate to minor prior the application of appropriate abatement measures. On the other hand, continuous inspection of parameters affecting public health and safety should be carried out and effective emergency response plans should be followed in case of critical

incidents. In this framework, the residual impact is assumed negligible after the application of the above mitigation measures.

b. Occupational H&S

The contractors will be responsible for the development of a Health and Safety system for the construction phase. The objective of the system should be “Zero Incidents” and ensure that all incidents are reportable. KSWSSC should approve the H&S system prior its application by the contractors and provide skilled personnel on site to ensure the inspection of performance and corrective actions. The contractors should ensure that safety training/induction will be performed before any new task is carried out on site. All precautions will be taken according to the provisions of law 12/2003 and its executive decrees and Law 4/1994 in relation to occupational health and safety. Impact on workers’ health and safety is short term, direct and temporary but may result in reversible or irreversible effects, as in the case of accidents. The impacts’ significance is considered minor. Monitoring of ambient air quality and ambient noise levels, will be carried out on frequent basis to record levels of humidity and heat stresses at the work place environment, according to the Egyptian legal provisions for Occupational Health and Safety. In this framework, the residual impact is assumed negligible after the application of the above mitigation measures.

Public Consultation and Stakeholder Engagement, where required

Initial consultation meetings were carried out with the project's principal stakeholders. The main objective of consultation during the scoping phase was to discuss the project with competent authorities, present the anticipated major environmental and social aspects and impacts, which would be outlined in the ESIA Scoping Report and further analysed and assessed in the ESIA Study, and receive their feedback with respect to potentially significant effects during implementation of the project.

Further to the consultation with key stakeholders, efforts were made 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), involved also the local Councils in the process of selecting the most appropriate routing of the sewerage networks and the sitting of wastewater treatment facilities. More specifically, during the field survey the project was openly discussed with local Councils and residents in order to identify all technicalities that could potentially delay or impede the effective and timely implementation of the project and get their unofficial consent to proceed. This interactive approach resulted in significant findings that were taken into account during the assessment of sanitation planning alternatives and the selection of the preferred alternative for the study area.