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Report No: 125002-EG

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM PAPER

ON A

PROPOSED ADDITIONAL LOAN

IN THE AMOUNT OF US\$300 MILLION

TO THE

ARAB REPUBLIC OF EGYPT

FOR THE

SUSTAINABLE RURAL SANITATION SERVICES PROGRAM-FOR-RESULTS

September 4, 2018

Water Global Practice  
Middle East and North Africa Region

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## CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2018)

Currency Unit = Egyptian Pound (EGP)  
EGP1 = US\$ 0.05661  
US\$1 = EGP 17.6633

### FISCAL YEAR

January 1 – December 31

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## ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
APA	Annual Performance Assessment
CAPWO	Cairo and Alexandria Potable Water Organization
CE	Citizen Engagement
CHM	Complaint Handling Mechanism
CPF	Country Partnership Framework
DLI	Disbursement Linked Indicator
DLR	Disbursement Linked Result
EGP	Egyptian Pound
ERR	Economic Rate of Return
ESSA	Environmental and Social Systems Assessment
EWRA	Egyptian Water Regulatory Agency
FSA	Fiduciary System Assessment
FY	Fiscal Year
GIZ	German International Development Organization
GoE	Government of Egypt
GRM	Grievance Redress Mechanism
HCWW	Holding Company for Water and Wastewater
HH	Household
ISC	Implementation Support Consultant
ISSIP	Integrated Sanitation and Sewerage Improvement Project
IVA	Independent Verification Agent
IWSP	Integrated Water and Sanitation program
KPI	Key Performance Indicator
M&E	Monitoring and Evaluation
MHUUC	Ministry of Housing, Utilities and Urban Communities
MoU	Memorandum of Understanding
NOPWASD	National Organization for Potable Water and Sanitary Drainage
NPV	Net Present Value
NRSP	National Rural Sanitation Program
NWSS	National Water and Sanitation Sector Strategy
O&M	Operation and Maintenance
OSHA	Occupational Safety and Health Administration
PAP	Program Action Plan
PBCG	Performance-based Capital Grant
PDO	Program Development Objective
PforR	Program for Results
PIAP	Performance Improvement Action Plan
PMCF	Program Management Consultant Firm
PMU	Program Management Unit
POM	Program Operations Manual
PPM	Procurement Procedures Manual
RA	Results Areas
SBD	Standard Bidding Documents
SORT	Systematic Operations Risk-rating Tool
SRSSP	Sustainable Rural Sanitation Services Program

SOP	Standard Operating Procedure
TA	Technical Assistance
TOR	Terms of Reference
WSC	Water and Sanitation Company
WSS	Water Supply and Sanitation
WWTP	Wastewater Treatment Plant

**ARAB REPUBLIC OF EGYPT**

**SUSTAINABLE RURAL SANITATION SERVICES PROGRAM**

**ADDITIONAL FINANCING DATA SHEET**

<b>Basic Information – Parent (Sustainable Rural Sanitation Services Program for Results – P154112)</b>			
Program ID:	P154112	Approval Date:	July 28, 2015
Program Name:	Sustainable Rural Sanitation Services Program for Results	Closing Date:	August 31, 2022
Product Line:	PE	Bank/IFC Collaboration	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Team Leader:	Osama Hamad		
Financing Instrument:	Program for Results	Does this operation have an IPF component?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Practice Area (Lead):	Water		
Is this a regionally tagged project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (if yes indicate countries)	Original Environmental Assessment Category (if IPF Component):	
		Current EA Category (if IPF Component):	
Implementing Agency: Ministry of Housing, Utilities and Urban Communities (MHUUC)			
<b>Basic Information – Additional Financing (AF to Sustainable Rural Sanitation Services Program – P166597)</b>			
Program ID:	P166597	Approval Date:	September 25, 2018
Program Name:	AF to Sustainable Rural Sanitation Services	Effectiveness Date:	January 1, 2019
Product Line:	PE	Projected Date of Full Disbursement:	December 31, 2023
Financing Instrument:	Program for Results	Revised Closing Date: (if applicable/ for restructuring)	December 31, 2023
Additional Financing Type:	<input checked="" type="checkbox"/> Scale Up <input checked="" type="checkbox"/> Restructuring <input type="checkbox"/> Cost Over Run	Bank/IFC Collaboration	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Does this operation have an IPF component?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
		Environmental Assessment Category (if IPF Component):	C

<b>Program Financing Data – Parent (Sustainable Rural Sanitation Services Program – P154112)</b>						
Disbursement Summary (from Parent ISR)						
Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed		
IBRD	US\$550.00 M	US\$288.45 M	US\$261.55 M	52.45%		
IDA						
Grants						
<b>Program Financing Data- Additional Financing (AF to Sustainable Rural Sanitation Services Program– P166597)</b>						
<b>Summary (USD Millions)</b>		<b>Total Amount (US \$m)</b>				
Government Program Cost:		11,300				
Total Operation Cost:		694 <sup>1</sup>				
Total Program Cost:		679				
IPF Component (if applicable):		15				
Other Costs:		0				
Total Financing:		600				
Financing Gap:		0				
<b>Financing (USD Millions)</b>						
Counterpart Funding						
Borrower:		94				
IBRD:		300				
Cofinancing –AIIB:		300				
<b>AF Client Information</b>						
<b>Borrower: The Arab Republic of Egypt</b>						
<b>Responsible Agency: Ministry of Investment and International Cooperation</b>						
Contact Person: Badr El Din Hassan Nour Eldin Hafez						
Telephone No.: +201006354735						
Fax No.: +23908159						
Email: bhassan@miic.gov.eg						
<b>AF Estimated Disbursements (Bank FY/US\$m)</b>						
FY	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Annual	17.75	87.0	62.75	50.75	50.75	31
Cumulative	17.75	104.75	167.5	218.25	269	300
<b>Summary of Proposed Changes</b>						
Change in Program’s Development Objectives					[ X ]Yes	[ ] No
Change in Program Scope					[ X ]Yes	[ ] No
Change in Results Framework					[ X ]Yes	[ ] No
Change in Legal Covenants					[X ]Yes	[ ] No
Change in Loan Closing Date(s) (Parent Program)					[ ]Yes	[ X ] No
Cancellations Proposed					[ ]Yes	[ X ] No

<sup>1</sup> Includes World Bank, Counterpart Funding and Co-financing contributions.

Change to Financing Plan	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Reallocation between and/or Change in DLI	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Change in DLI Verification Protocol	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Change in Key Parameters (Disbursement Arrangements, Institutional Arrangements, Technical, Fiduciary, and Environmental and Social aspects)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Change in Safeguard Policies Triggered	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Change of EA Category (if IPF Component)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Change in Program Action Plan	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Other Change(s)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<b>Program Development Objective and Description</b>		
<p><b>Parent Program Development Objective:</b> To strengthen institutions and policies for increasing access and improving rural sanitation services in the Governorates of Beheira, Dakahliya, and Sharkiya in the Arab Republic of Egypt.</p> <p><b>Revised Program Development Objective:</b> To strengthen institutions and policies for increasing access and improving rural sanitation services in selected governorates in the Arab Republic of Egypt.</p> <p><b>Program description:</b> The Program is a part of the Borrower's National Rural Sanitation Program (NRSP) and consists of the following result areas (RAs) and activities:</p> <p><b>A. Improved sanitation access:</b></p> <p>(i) Provision of access to sanitation to about 1,727,000<sup>2</sup> people living in highly polluted villages and satellite areas within the Program Area in the selected governorates, through (i) the construction by the respective Water and Sanitation Companies (WSCs) of about 345,317 new connections from households to a sewer network that is linked to a wastewater treatment facility or other effective wastewater treatment system.</p> <p>(ii) Constructing or upgrading of wastewater treatment facilities to appropriate standards.</p> <p>(iii) Utilization of Performance-based Capital Grants made by MHUUC to WSCs to carry out priority rural sanitation investments identified through the Master Plans and included in the Annual Capital Investment Plan of the WSCs.</p> <p><b>B. Improved operational systems and practices of WSCs:</b></p> <p>Strengthening the capacity of the WSCs to improve their performance in the operational, financial, institutional, and citizen engagement areas, including in the planning and implementation of infrastructure investments and in their operational and maintenance requirements, improving efficiency and reducing costs, and designing and implementing performance improvement plans.</p> <p><b>C. Strengthened national sector framework:</b></p> <p>Activities will focus on measures that are critical for the long-term sustainability of the sector and improved service delivery and will include:</p>		

<sup>2</sup> Beneficiaries are calculated based on the average five people per household (HH) connection. Parent Program is financing 167,000 HH connections (or 835,000 beneficiaries), while the AF will finance 178,317 HH connections (or around 892,000 beneficiaries). In total, the Program will support 345,317 HH connections that would connect about 1,727,000 beneficiaries to sanitation services.

(1) Strengthening the enabling environment for more efficient and accountable rural sanitation service delivery including: (i) developing a tariff structure for sanitation services that would enable cost recovery; (ii) formulating the National Water and Sanitation Sector Strategy; and (iii) finalizing and updating the standard operating procedures for land acquisition for rural sanitation services.

(2) Carrying out policy and analytical studies to inform the policy making process in the rural sanitation sector, including building and sustaining an effective regulatory and oversight framework, and improving the capacity to conduct regular and timely financial and performance audits of WSCs, aimed at providing a strong enabling framework for empowering the WSCs to become efficient and accountable service delivery institutions.

(3) (i) Strengthening the national regulatory framework for water and sanitation; (ii) developing a financial and tariff model that allows for sustainable cost recovery for water and sanitation, and (iii) undertaking analytical studies to inform the National Water and Sanitation Sector Strategy and developing an action plan with timelines for implementation of the National Water Sanitation Sector Strategy.

**Technical Assistance as an IPF component.** An IPF component under the AF with a loan allocation of US\$15 million is provided to support capacity building for key institutions within the sector and strengthening the enabling environment for efficient and accountable rural sanitation service delivery.

<b>Compliance</b>			
Has the parent Program been under implementation for at least 12 months		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Have the DO and IP ratings for the parent Program been rated moderately satisfactory or better for at least the last 12 months?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the Program depart from the CPF in content or in other significant respects?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Does the Program require any waivers of Bank policies?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Have these been approved by Bank Management?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Is approval of any policy waiver sought from the Board (or MD if RETF operation is RVP approved)?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Has this been endorsed by Bank Management?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Legal Covenants - Parent (Sustainable Rural Sanitation Services Program – P154112)</b>			
Change in Legal Covenant?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Loan/Credit/TF	Description of Condition/Covenant	Status	Action
<b>Legal Covenants - (AF to Sustainable Rural Sanitation Services Program– P166597)</b>			
<b>Loan Agreement</b>			
Schedule 2, Section I.C.2(b): The Borrower shall, through MHUUC, no later than six months after the Effectiveness Date, hire and thereafter retain a firm or consultants with terms of reference acceptable to the Bank to provide support to the PMU in management and coordination of the Operation, including the planning of projects and activities described in Schedule 1 of the Loan Agreement, project management, supervision of engineering works, assistance in procurement processes, and quality assurance relating to the overall implementation of the Operation.			



Schedule 2, Section I.C.3(a): The Borrower through MHUUC and its PMU, shall no later than one (1) month after the Effective Date, adopt the Operations Manual as updated in form and substance satisfactory to the Bank and carry out its respective activities under the Operation in accordance with the provisions of the Operations Manual.

Schedule 2, Section I.C.9.: The Borrower shall, no later than three (3) months after the Effective Date, engage an Independent Verification Agent, to prepare and provide verification reports certifying the achievement of the DLRs, all in accordance with procedures and arrangements acceptable to the Bank as referred to in Section IV.B.1(c) of this Schedule.

Schedule 2, Section I.C.13(a): The Borrower through MHUUC, shall: (i) no later than one (1) month after the Effective Date, adopt the Verification Protocol as updated in form and substance acceptable to the Bank, and (ii) ensure that verification of the achievement of DLRs are carried out in accordance with the Verification Protocol.

Schedule 2, Section I.C.15(b): For purposes of implementation of the IPF component of the Operation (the Project), the Borrower shall not later than 2 (two) months before starting each FY, furnish the draft AWPB to the Bank for its review, and promptly thereafter finalize the AWPB, taking into account the Bank’s comments thereon.

**Program Agreement:**

Schedule, Section I, C.3: The Program Implementing Entities shall adopt, no later than one (1) month after the Effective Date, the Operations Manual as updated in form and substance satisfactory to the Bank, and immediately thereafter carry out their respective activities under the Program in accordance with the provisions of the Operations Manual.

Schedule, Section I, C9: Each of Damietta WSC, Gharbiya WSC, and Menoufia WSC shall, no later than three (3) months after the Effective Date, adopt and immediately thereafter operationalize a complaints and grievance redressal mechanism to handle complaints and grievances from Program beneficiaries or third parties relating to any aspects of the Program including adverse social and environmental impacts, allegations of fraud and corruption, and procurement related matters.

**Conditions**

Type	Description of Condition
Withdrawal Conditions; Withdrawal Period.	No withdrawal shall be made for any DLR under Categories (1) through (8), until and unless the Borrower has furnished evidence satisfactory to the Bank that said DLR has been achieved. Such verification documents and information shall include verification reports from the Independent Verification Agent, based on reports prepared by MHUUC and the Program Implementing Entities certifying the achievement of the DLRs in accordance with procedures and arrangements, and the Verification Protocols acceptable to the Bank.

**Institutional Data**

**Contributing Practice Areas: Water Practice**

**Climate Change and Disaster Screening**

Has the operation been screened for short or long-term climate change and disaster risks?

Yes  No

**Gender Tag**

Does the program plan to undertake any of the following?

- a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF  
Yes
- b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment  
Yes
- c. Include Indicators in results framework to monitor outcomes from actions identified in (b)  
Yes

**Task Team****Bank Staff**

<b>Name</b>	<b>Role</b>	<b>Specialization</b>	<b>Unit</b>
Osama Hamad	Team Leader	Lead Water Supply and Sanitation Specialist	GWA05
Luis R. Prada Villalobos	Procurement Specialist	Senior Procurement Specialist	GGOPM
Mohamed Yahia Ahmed Said Abd El Karim	Financial Management Specialist	Senior Financial Management Specialist	GGOMN
Amal Nabil Faltas Bastorous	Social Safeguards Specialist	Senior Social Development Specialist	GSU05
Bernard Pieter De Ru	Team Member	Consultant	GWA05
Claire Chase	Team Member	Economist	GWAGP
Claudine Kader	Team Member	Program Assistant	GWA05
Elena Gagieva-Petrova	Team Member	Operations Officer	GWA05
Enas Shaaban Mahmoud	Team Member	Program Assistant	MNCEG
Gustavo Saltiel	Team Member	Lead Water Supply and Sanitation Specialist	GWA04

Heba Yaken Aref Ahmed	Team Member	Operations Analyst	GWA05
Pier Francesco Mantovani	Team Member	Lead Water Supply and Sanitation Specialist	GWA08
Mohammad Farouk Ibrahim Kandeel	Environmental Safeguards Specialist	Senior Environmental Specialist	GEN05
Mouhamed Fadel Ndaw	Team Member	Senior Water Supply and Sanitation Specialist	GWA05
Sara Mohamed Mahmoud Aly Soliman	Team Member	Temporary	GWA05
Vivek Srivastava	Team Member	Lead Public Sector Development Specialist	GGODZ
Basheer Jabr	Procurement Specialist	Procurement Specialist	GGOPM
Rebecca Jean Gilsdorf	Team Member	Young Professional	GWA08
Dina Elabd	Team Member	Consultant	GTD05
Madiha Afifi	Team Member	Consultant	GSU05
Cathie Wissa	Team Member	Consultant	GSU05
William Kingdom	Team Member	Lead Water Supply and Sanitation Specialist	GWA01
Hosam Diaaeldin Hassan	Financial Management Specialist	Senior Financial Management Specialist	GGOMN
Abdelhamid Beshara	Team Member	Consultant	GEN05
Neha Dhoundiyal	Financial Management Specialist	Financial Management Specialist	GGOIS
Mei Wang	Senior Counsel	Senior Counsel	LEGAM

## ARAB REPUBLIC OF EGYPT

### AF TO SUSTAINABLE RURAL SANITATION SERVICES PROGRAM

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## I. Introduction

1. This Program Paper seeks the approval of the Executive Directors to provide additional financing (AF) in an amount of US\$300 million to the Arab Republic of Egypt for the Sustainable Rural Sanitation Services Program (SRSSP, the Program).

2. The US\$550 million IBRD parent loan for SRSSP was approved on July 28, 2015 and became effective on December 30, 2015. The original loan closing date was October 2020, which was subsequently extended to August 31, 2022 through a restructuring in May 2018<sup>3</sup>. As of August, 2018, the SRSSP loan had disbursed US\$288.45 million<sup>4</sup> (52.45 percent) against a projected target of 51 percent.

3. The proposed additional loan would help finance the expenditures associated with scaling up the Program to three additional governorates in the Nile Delta and introduce an Investment Project Financing (IPF) component for technical assistance (TA) on strategic sector issues. The additional loan will have a closing date of December 31, 2023, i.e., 16 months beyond the current closing date of the parent loan.

## II. Background and Rationale for Restructuring and AF in the amount of US\$300 million

4. In the past two decades Egypt has made significant progress in providing direct access to safe drinking water at the household level (96 percent) and basic sanitation services (82 percent). However, geographic and socio-economic disparities remain: an estimated 90 percent of urban households are covered by public sewers, compared to only 18 percent in rural areas. In rural areas, an estimated 77 percent of collected wastewater is currently treated but most treatment plants do not achieve Egyptian effluent standards. Rural areas of the Nile Delta are particularly affected due to high population density, shallow groundwater levels, and the discharge of untreated sewage directly into the water system. This situation is expected to worsen due to climate change (see paragraphs 52 - 54 for the expected climate change impacts).

5. The National Organization for Potable Water and Sanitary Drainage (NOPWASD) is responsible for developing water and sanitation infrastructure, while operation and maintenance (O&M) is the responsibility of the Holding Company for Water and Wastewater (HCWW) through its subsidiaries, WSCs.

6. The Government's US\$11.3 billion National Rural Sanitation Program (NRSP, a key Presidential Program) aims to provide universal access to rural sanitation services and to encourage improved performance and sustainability at the WSC level. SRSSP finances a portion of NRSP in three Governorates that discharge into the highly polluted Al Salam and Rosetta Branch waterways in the Delta. SRSSP is focused on three key Results Areas (RA): improved sanitation access; improved operational systems and practices of WSCs; and strengthened national sector framework.

### *Progress of SRSSP*

7. ***The Program has made good progress after a slow start.*** As of early May 2018, some 92,000 household (HH) connections have been designed; 15,000 HH connections are under construction; and 5,000 rural HH connections have been established (disbursement linked indicator (DLI1)). This is complemented by the achievement of key sector reform initiatives: annual transfers of performance-based grants from MHUUC to the WSCs (DLI2); preparation and approval of Performance Improvement

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<sup>3</sup> SRSSP Restructuring Paper, May 2018, WB Report No: 124514-EG

<sup>4</sup> This includes a 25 percent advance (US\$137.5 million).

Action Plans (PIAPs) for each of the WSCs and Annual Performance Assessment Manual (APA) (DLI3); preparation, approval, and the start of implementation of a new national tariff for water and sanitation services (DLI4); the Program Management Unit (PMU) has been established (DLI5) and the standard operating procedures (SOPs) for land acquisition under NRSP have been approved (DLI6). Moreover, all legal covenants under the Program have been fulfilled. The Program has completed two cycles of verification and has disbursed against the two sets of verified DLIs.

8. **Progress on the Program Action Plan (PAP) has been satisfactory.** The Program Agreement between the PMU and implementing entities (i.e., WSCs, HCWW, and the Egyptian Water Regulatory Agency (EWRA)) is in place and the Program Operations Manual (POM) has been approved. Progress on PAP actions in Financial Management, Procurement, and Environmental and Social Risk Management are summarized below.

9. **Financial Management.** The Program financial management system provides reasonable assurance that Bank loan proceeds are being used for intended purposes. The external auditor has completed the first Program audit for the period December 31, 2015 to June 30, 2017 and has provided an unmodified audit opinion, reflecting the fair presentation of the Program “Cash Receipts and Disbursements” statement. The results of the audit have been made public, as specified in the PAP. Implementation of financial software needs more attention from the PMU, as expenditures are expected to increase rapidly over the coming period.

10. **Procurement.** The procurement system is functioning in accordance with the PAP. The three WSCs are using the Procurement Procedures Manual (PPM) and the Standard Bidding Documents (SBD). The PPM has been updated to reflect lessons learned from the initial experience. The Complaints Handling Mechanism (CHM) will become fully operational once the Independent Panel members are appointed. Progress is being made in the use of the Government of Egypt (GoE) e-portal ([www.etenders.gov.eg](http://www.etenders.gov.eg)), which is being complemented by the publication of additional information on the WSCs’ websites. The current portal may need further technical enhancements to allow WSCs to advertise all relevant information.

11. **Environmental and Social Risk Management.** SOPs for land acquisition have been completed and operationalized (DLI6). Systems for the Program’s Environmental and Social Impact Assessments (ESIAs) and for the initiation and updating of Environmental Registers in wastewater treatment plants (WWTPs) have been developed, while occupational health and safety (OHS) measures on construction contracts have been improved. However, a fatal accident that occurred on a construction site of the parent Program on June 5, 2018 revealed some weaknesses in the OHS management in the sector that have been subsequently addressed in the PAP and other environment and social documents. The PMU and the WSCs have recruited and trained environmental and social specialists. Citizen engagement has been improved through: the enhancement of the WSC Complaints Handling Mechanism (CHM, which is integrated with the program-level grievance redress mechanisms); new awareness raising activities; new citizen feedback mechanisms (satisfaction survey and initiation of Citizen Report Cards); and improved information dissemination and public disclosure mechanisms to enhance transparency and accountability of WSCs. The GoE has gone beyond the parent Program scope by: (i) establishing a High-Level Citizen Engagement Committee for strategic planning and policy making at the ministerial level; (ii) establishing Local Community Committees at the village level; and (iii) addressing sludge management at the WWTPs.

12. **Program restructuring.** A Program restructuring was completed in May 2018 to address certain urgent needs that included: (i) revision of some DLIs and their associated disbursement linked results

(DLRs) to allow for increased flexibility pertaining to the Performance based Capital Grants (PBCGs) and the APA methodology, and their reflection in the DLI verification protocol; (ii) revision of the results framework to reflect the replacing of the National Rural Sanitation Strategy by the expanded National Water and Sanitation Sector Strategy in DLI 5; (iii) extension of the loan closing date by 22 months (to August 31, 2022) and adjustments to DLIs 1, 2 and 3 and their disbursement targets to reflect initial implementation delays; (iv) revision of the PAP to remove the date from one of the actions related to the performance evaluation system; (v) revision of a few legal covenants (on the PBCG, and to reflect the progress made on the Land Acquisition SOPs, the PPM, and the SBDs); and (vi) inclusion of activities in the Program scope to facilitate the preparation of the AF.

13. **Program Ratings.** Due to initial implementation delays, Implementation Progress was rated as moderately satisfactory as of May 2018. However, following the restructuring processed in May 2018, it was upgraded to satisfactory, as the restructuring introduced the needed adjustments to the DLI and legal covenant formulation, and provided extra time to compensate for the initial delays, thus putting the implementation progress and Program development objectives (PDO) achievement on the right track. Progress towards achievement of the PDO has been rated satisfactory since 2016.

14. **Donor Aid Coordination.** Past technical assistance from the United States Agency for International Development, the European Union, and the German International Development Organization provided a solid foundation for NRSP. The GoE is now engaging with additional development partners – the European Bank for Reconstruction and Development, the Arab Fund for Economic and Social Development, the European Union, the African Bank for Development, and the European Investment Bank. The table below summarizes the GoE and IBRD contributions, as well as the amounts pledged by various donors and their contributions so far.

**Table 1: Total Pledged Amounts and Contributions to Program Financing**

<b>Donor</b>	<b>Amount Pledged to the Program (US\$ million)</b>	<b>% of Total (Planned)</b>	<b>Contributions to the Program (US\$ million)</b>	<b>% of Total (Contributed)</b>
GoE	170	14	275	35
IBRD	550	44	288.45*	36
EBRD, AFESD, KFW, EU, AFDB and EIB**	530	42	227.1	32
<b>Total Program Financing</b>	<b>1,250 million</b>	<b>100</b>	<b>790.55 million</b>	<b>100</b>

\* Amount disbursed as of August 2, 2018, including an advance of US\$137.5 million.

*\*\*Financing same governorates.*

### ***Rationale for the AF of US\$300 million***

15. The AF will build on the success and strong impact of the parent Program by expanding the geographical coverage to three additional governorates (i.e., Menoufiya, Damietta, and Gharbiya) that discharge into the same highly polluted Al Salam Canal and Rosetta Branches. The AF will continue to support improved service delivery, while also furthering the reform agenda. It will allow seamless expansion and deepening of the Program, delivery of results on the ground in a reasonable timeframe, and maintain the positive momentum created under the Program. The AF will extend access to sanitation services to an additional 178,317 HHs and introduce an IPF component for Technical Assistance.

16. ***Asian Infrastructure Investment Bank (AIIB) Co-Financing.*** AIIB will co-finance the AF in the amount of US\$300 million, thus demonstrating confidence in the Program's approach and significantly leveraging the Bank's support. As of August 28, 2018, the negotiations between the AIIB and the GoE have concluded successfully, adopting the design and implementation arrangements of the Program. The AIIB Board approval of the AIIB loan is set to follow that of the World Bank's, in late September 2018. Details of the cooperation between the Bank and the AIIB will be detailed in a co-financing agreement.

17. ***Higher Level Objectives to Which the Program Contributes.*** The Program, including the AF, is aligned with the World Bank Group's strategic goals of ending extreme poverty and boosting shared prosperity in a sustainable manner by contributing to the reduction of poverty and fostering inclusion through improvements in sanitation services in rural areas, strengthening institutions and fostering transparency by improving citizen engagement. The Program is in line with the World Bank Group's FY 2015-2019 Country Partnership Framework (CPF) for Egypt<sup>5</sup>, in particular: (i) Focus Area 1: Improving Governance and Institutional Reform, by promoting transparency and efficiency, supporting inclusive institutions, and promoting citizen engagement and voice; and (ii) Focus Area 3: Social Inclusion, including improvements to water service delivery, water quality, and sanitation services. The Program is also aligned with the "renewing the social contract" pillar of the World Bank Group's strategy for the Middle East and North Africa Region<sup>6</sup>. By strengthening water and sanitation information and monitoring, the Program will allow for evidence-based decision making and planning, contributing to the mitigation of the impacts of climate change.

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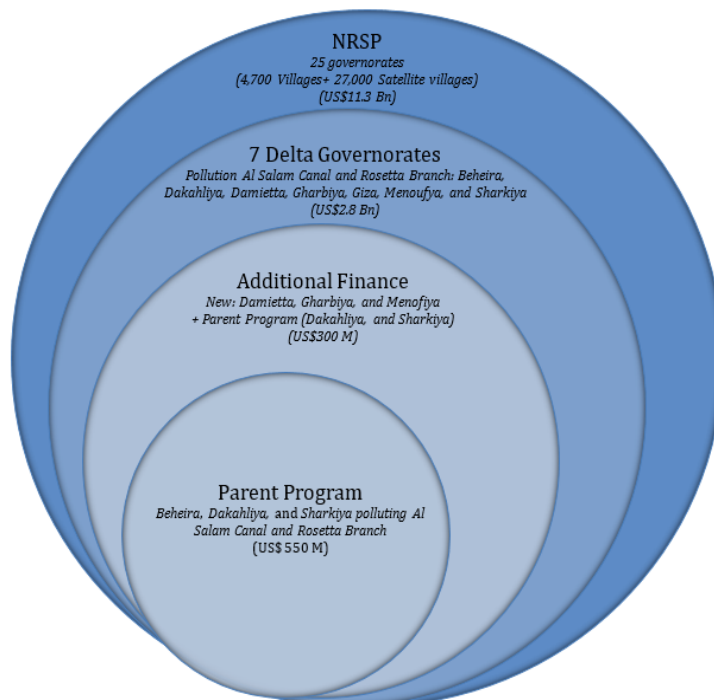
<sup>5</sup> Report No. 94554-EG, discussed by the Board on December 17, 2015.

<sup>6</sup> World Bank Regional Strategy for Middle East and North Africa Region (2015): Economic and Social Inclusion for Peace and Stability in the Middle East and North Africa: A New Strategy for the World Bank Group.



### III. Proposed Changes

18. **Program Boundary.** This AF will build on the success of the parent Program and will scale it up to include three additional NRSP governorates – Damietta, Gharbiya and Menoufiya – and their respective WSCs. The RAs will remain unchanged. The diagram at right shows boundaries of the Government NRSP program. The seven governorates (called “the Delta Governorates”) represent a subset of the NRSP that pollute Al Salaam Canal and the Rosetta Branch of the Nile Delta. The parent Program is shown as a slice of the NRSP covering three Governorates (Beheira, Dakahliya and Sharkiya). The AF would include three additional eligible Governorates (Damietta, Gharbiya and Menoufiya), and two of the parent Program Governorates (Dakhaliya and Sharkiya). Beheira Governorate will not be covered under the AF since all its eligible villages are covered under the Parent operation.



**Table 2: Boundaries of the Government program (NRSP) and the SRSSP/AF**

Government program (4,740 Villages and 27,000 Satellites)		SRSSP (Beheira, Sharkiya, Dakahliya)		AF (Dakahliya, Damietta, Gharbiya, Menoufia and Sharkiya)	
Topic	US\$bn	Area	US\$m	Area	US\$m
1. Improved Sanitation Access	11.3	1. Improved Sanitation Access	500	1. Improved Sanitation Access	535
2. Improved Operational Systems and Practices of WSCs		2. Improved Operational Systems and Practices of WSCs	50	2. Improved Operational Systems and Practices of WSCs	50
3. Strengthened National Sector Framework		3. Strengthened National Sector Framework	0*	3. Strengthened National Sector Framework	0*
				IPF TA	15
<b>Total</b>	<b>11.3</b>		<b>550</b>		<b>600**</b>

\* The above figures reflect anticipated Program expenditures. The Program is designed to incentivize the reform agenda by having some of the funds required for the HH connections disburse based on indicators in RAs 2 and 3. Consequently, the full DLI table (Annex 2, Table 2.1) shows a different distribution of funds across the results areas/DLIs.

\*\*Includes co-financing from AIIB

19. **PDO.** The PDO will be amended to remove the names of individual governorates and instead refer to “selected governorates,” but will otherwise remain unchanged. The updated PDO will read: To strengthen institutions and policies for increasing access and improving rural sanitation services in selected Governorates in the Arab Republic of Egypt. By ensuring more people will have access to good-quality sanitation services, the available fresh water supplies will become less contaminated and therefore the risk of water scarcity in the targeted Governorates will be reduced.

20. **Program description.** The Program is a part of the Borrower's NRSP and consists of the RAs and activities described below.

21. **Improved sanitation access.** This includes:

(i) Provision of access to sanitation to about 1,727,000<sup>7</sup> people living in highly polluted villages and satellite areas within the Program Area in the selected governorates, through the construction by the respective WSC of about 345,317 new connections from HHs to a sewer network that is linked to a wastewater treatment facility or other effective wastewater treatment system.

(ii) Constructing or upgrading of wastewater treatment facilities to appropriate standards.

(iii) Utilization of Performance-based Capital Grants made by MHUUC to WSCs to carry out priority rural sanitation investments identified through the Master Plans and included in the Annual Capital Investment Plan of the WSCs.

22. **Improved operational systems and practices of WSCs.** Strengthening the capacities of the WSCs to improve their performance in the operational, financial, institutional, and citizen engagement areas, including in the planning and implementation of infrastructure investments and in their operational and maintenance requirements, improving efficiency and reducing costs, and designing and implementing performance improvement plans.

23. **Strengthened national sector framework.** Activities will focus on measures that are critical for the long-term sustainability of the sector and improved service delivery, and will include:

(a) Strengthening the enabling environment for more efficient and accountable rural sanitation service delivery including: (i) developing a tariff structure for water and sanitation services that would enable cost recovery; (ii) formulating the National Water and Sanitation Sector Strategy; and (iii) finalizing and updating the standard operating procedures for land acquisition for rural sanitation services.

(b) Carrying out policy and analytical studies to inform the policy making process in the rural sanitation sector, including building and sustaining an effective regulatory and oversight framework, and improving the capacity to conduct regular and timely financial and performance audits of WSCs, aimed at providing a strong enabling framework for empowering the WSCs to become efficient and accountable service delivery institutions.

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<sup>7</sup> As mentioned earlier, beneficiaries are calculated based on the average five people per HH connection. Parent Program is financing 167,000 HH connections (or 835,000 beneficiaries), while the AF will finance 178,317 HH connections (or 892,000 beneficiaries). In total, the Program will support 345,317 HH connections that would connect about 1,727,000 beneficiaries to sanitation services.

- (c) (i) Strengthening the national regulatory framework for water and sanitation; (ii) undertaking analytical studies to inform the National Water and Sanitation Sector Strategy and developing an action plan with timelines for implementation of the National Water Sanitation Sector Strategy.

24. **Technical Assistance (TA) Component.** The Program had so far benefitted from the TA support from Water and Sanitation Program (WSP, now closed) and from Integrated Sanitation and Sewerage Improvement Project 2 (ISSIP2) through a dedicated IPF component (closing in December 2018). Therefore, an IPF component under the AF with a loan allocation of US\$15 million is provided to support capacity building for key institutions within the sector and strengthening the enabling environment for efficient and accountable rural sanitation service delivery, including, *inter alia*:

- (a) Strengthening EWRA's regulatory functions to enable it to deliver its business mandate, including:
  - (i) developing a water supply and sanitation (WSS) information management system and providing related training; (ii) improving EWRA's institutional performance through conducting institutional development surveys, developing terms of references for EWRA staff employment, and staff training; (iii) preparing standard operating procedures and a business plan for EWRA; and (iv) engaging consultants to support EWRA improving its institutional effectiveness;
- (b) Strengthening the Borrower's capacity in verifying the Program's DLIs/DLRs through, *inter alia*, hiring of an Independent Verification Agent (IVA);
- (c) Strengthening the capacity of the Program implementing entities in achieving the DLIs/DLRs through learning and training support;
- (d) Strengthening the capacity of the PMU in performing management, coordination, monitoring and evaluation functions for the Program, through financing required goods, consultant services and Operating Costs;
- (e) Strengthening the capacity of the MHUUC/PMU in performing sector planning and policy making functions for the water and sanitation sector through carrying out related advisory, analytical studies and capacity building activities.

25. **Changes to DLIs.** The DLI framework has been updated to reflect the geographic expansion of the Program and the deepening of reforms. The proposed changes to DLIs are summarized in Table 3. Annex 2 provides additional details on the DLIs and DLRs under both the parent Program and the AF, including the allocated amounts, baselines, yearly targets, requirements of achievement, and DLRs eligible as prior results achieved after April 1, 2018.

**Table 3: Proposed DLI Matrix Under the AF**

Current/Proposed DLIs	Comment
<p><b>DLI1 (revised):</b> Establishment and functioning of at least 178,317 new HH connections to working sanitation systems in villages and satellites in the Dakhaliya, Sharkiya, Damietta, Gharbiya and Menoufiya Governorates, of which at least 10% of the connections are in satellites.</p>	<p>DLI1 revised to reflect the target for the HH connections under the AF. Similar DLRs have been added to disburse for design and HH connections established. DLRs revised to allow for greater flexibility in disbursing.</p>
<p><b>DLI2:</b> Annual transfer of Performance-based Capital Grants (PBCG) by MHUUC to eligible WSCs pursuant to the provisions of paragraph 6 of Section I.C of Schedule 2 to this Agreement [i.e., the SRSSP Loan Agreement]</p>	<p>DLRs to be added, with updated schedule, for the three additional WSCs.</p>
<p><b>DLI3:</b> Design and implementation of the APA system for the WSCs, and WSCs achievement of the required APA weighted index scores in accordance with the Program Operations Manual.</p>	<p>DLRs added for the three new WSCs, reflecting the AF implementation period.</p>
<p><b>DLI4:</b> Preparation and approval of a new national tariff structure for water supply and sanitation services by MHUUC to allow for sustainable cost recovery.</p>	<p>Achieved under parent Program.</p>
<p><b>DLI5:</b> Establishment of PMU and approval of a National Water and Sanitation Sector Strategy (NWSS) by MHUUC.</p>	<p>Addition of a new DLR for issuing an action plan and timeline for the implementation of the NWSS. A Strategic Environmental and Social Assessment (SESA) will be prepared as part of the NWSS.</p>
<p><b>DLI6:</b> Standard Operating Procedures (SOPs) for land acquisition developed under the Program updated by MHUUC acceptable to the Bank and approved for implementation.</p>	<p>Addition of new DLRs for the revision of land SOPs, Bank approval of the revisions, and signing of an inter-ministerial MOU for the implementation of an updated land SOP.</p>
<p><b>DLI7 (new):</b> Strengthen the national regulatory framework for Water and Sanitation.</p>	<p>To support strengthening of EWRA, a key institution within the sector, DLI 7 has been added. The DLI includes DLRs for: (i) a ministerial decree for the establishment of a unified WSS information system (prior result); (ii) approval of EWRA’s standard business operating procedures by EWRA board; (iii) approval by the EWRA Board of a design manual for the WSS for tracking WSCs’ performance; and (iv) publication by EWRA of annual reports on performance of the rural water and sanitation sector at the national level.</p>
<p><b>DLI8 (new):</b> Approval of a financial and tariff model that allows for sustainable cost recovery of water and sanitation services.</p>	<p>To support the GoE’s aims of improved cost recovery within the sector, this DLI will disburse against MHUUC approval of the financial model for the updating of the tariff structure that allows for sustainable cost recovery efficiency, and social considerations of water and sanitation services. The model will be informed by national and international good practices and will be supported by TA under the IPF component. This DLI also includes a DLR (prior result) for an MHUUC decree for the development of the model.</p>

26. **Changes to Program Institutions.** Three new WSCs and the EWRA will be added to the Program as implementing entities. The fiduciary, environmental and social arrangements will remain unchanged. Annex 2 includes additional information for the new and modified DLIs, as well as information on the updated disbursement arrangements.

27. **Expenditure Framework.** The Government program, the NRSP, was to cover 4,700 villages and 27,000 satellites with an estimated population of 45 million at an estimated cost of EGP100 billion (US\$14 billion). These have now been modified to 4,740 villages with an estimated population of 50.66 million and a re-estimated cost of EGP200 billion (US\$11.3 billion) due to the depreciation of the EGP.

28. As of June 27, 2018, the Program had verified the achievement of DLRs 1.1, 2, 3.1, 3.2, 4.1, 4.2, 5.1, and 6. These DLRs and the results achieved are shown in Table 4. (Note that the total disbursement of US\$288.45 million includes an advance.)

**Table 4: Achieved DLRs (as of June 30, 2018)**

DLI	DLR	DLR Loan Proceeds Disbursed (US\$ M)
DLI1: Establishment and functioning of at least 167,000 new Household (HH) connections to working sanitation systems in villages and satellites of which at least 10% of the connections are in satellites.	DLR1.1: Final designs completed for at least 92,000 connections.	27.95
DLI2: Annual transfer of Performance-based Capital Grants (PBCG) by MHUUC to eligible WSCs pursuant to the provisions of paragraph 6 of Section I.C of Schedule 2 to this Agreement	DLR2: PBCG has been transferred by MHUUC to eligible WSCs (FY18)	8
DLI3: Design and Implementation of the annual performance assessment (APA) system for the WSCs, and WSCs achievement of the required APA weighted index scores in accordance with the Program Operations Manual.	DLR3.1: Performance Improvement Action Plans (PIAPs) prepared for the three WSCs.	15
	DLR3.2: A manual for carrying out the APA of the WSCs has been prepared.	20
DLI4: Preparation and approval of a new national tariff structure for water and sanitation services by MHUUC to allow for sustainable cost recovery.	DLR4.1: A new national tariff structure for water and sanitation services has been prepared by MHUUC	10
	DLR4.2: A new national tariff structure for water and sanitation services has been approved by MHUUC and a decree has been issued.	40
DLI5: Establishment of PMU and approval of a National Rural Sanitation Strategy by MHUUC.	DLR5.1: The PMU has been created with a mandate for the formulation and coordination of NRSP and the National Rural Sanitation Strategy.	10
DLI6: Approval of Standard Operating Procedures for land acquisition under NRSP by MHUUC.	DLR6: Standard Operating Procedures for land acquisition under NRSP have been approved by MHUUC.	18.625
TOTAL		149.575

29. **Updated Program Financing.** The updated financing arrangements are shown in Table 5. For the AF, the GoE will provide an additional US\$94 million to support further infrastructure investments in the target areas. In addition, AIIB intends to support the Program with a loan of US\$300 million in co-financing with the planned approval of this proposed loan in late September 2018. It should be noted that AfDB, AFESD, EBRD, EIB, EU and KFW are financing AF governorates with the amount of US\$300 million.

**Table 5: Financing Table (US\$ million)**

<b>Financing Source</b>	<b>SRSSP</b>	<b>AF</b>	<b>Total</b>
BORROWER/RECIPIENT	275	94	369
IBRD	550	300	850
AfDB, AFESD, EBRD, EIB, EU and KFW	227.1	300	527.1
AIIB		300	300
TOTAL	1,052	994	2,046

#### **IV. Appraisal Summary**

30. **Technical.** An addendum to the Technical Assessment of the Program has been prepared, considering the implementation of the Program to date and any changes required as a result of the proposed AF. Overall, the main elements of the Program Technical Assessment remain valid, except for the changes related to the Program boundaries and the monitoring and evaluation (M&E) system due to the addition of new WSCs and EWRA as implementing agencies.

31. The scope of the AF will cover 133 villages and 32 WWTP clusters. Table 6 presents the HH connections completed and planned for the parent Program and the AF.

**Table 6: HH Connections Under SRSSP and the AF**

Governorate	SRSSP					SRSSP AF		
	Cluster	Village	Satellites	HH Connections Planned	HH Connections Completed	Cluster	Village	HH Connections Planned
Beheira	1	8	27	11,000	0			
Dakahliya	23	94	437	75,000	0	3	13	30,996
Sharkiya	14	53	519	81,000	5000 (in FY2018)	2	13	19,492
Gharbiya						6	26	32,475
Damietta						6	12	14,254
Menoufiya						15	69	81,100
<b>Total</b>	<b>38</b>	<b>164</b>	<b>983</b>	<b>167,000</b>	<b>5000</b>	<b>32</b>	<b>133</b>	<b>178,317*</b>

\* Source: Technical Assessment survey from pre-selected villages, which is slightly higher than the 178,317 targeted HH connections. The final number of connections for the AF will be reduced to 178,317 after the pre-feasibility studies, depending on selection criteria (technical, land availability, etc.)

32. The technical assessment focused on the staffing, operating budget, project management, O&M and M&E capacities of the AF WSCs. The PMU and EWRA roles and performance in the Program were also assessed. The main findings of the Addendum to the Technical Assessment of the parent program are:

- a. The current PMU model is a project-based model and is not sustainable. There is an urgent need for the PMU to shift to a formal institutionalized structure, while maintaining the same mandates and supporting the development and implementation of the National Water Sanitation and Sector Strategy and its associated action plan.
- b. EWRA, which was expected to play a key role in M&E of the WSCs under the Program, has struggled to retain qualified staff and lacks a high-quality M&E system. In view of this, a new, unified and comprehensive WSS information system will be created under the AF. EWRA will be strengthened to play its intended role in terms of monitoring and benchmarking the WSCs, providing incentives for performance improvement, and determining the tariff based on a sustainable cost-recovery financial model for the WSCs. The current regulatory model and operator financial model are affected by unclear tariff setting procedures.
- c. The AF WSCs will need additional support to undertake the necessary procurement, construction and contract management responsibilities. The O&M burden is expected to increase under the AF and lack of financial sustainability which may put sustainable O&M of the new infrastructure at risk. Despite considerable O&M subsidies, overall funding availability is below 15 percent of the recurrent budgets of most WSCs. Deficits are controlled by deferring maintenance and postponing payments for electricity.

33. These weaknesses will be addressed in the AF through: (i) strengthening the regulator (EWRA), including development and implementation of the WSS information system and a new financial model for ensuring cost recovery; (ii) providing capacity building support to the WSCs on procurement and on the establishment of construction departments; (iii) assigning sufficient experienced staff at the WSC level to

implement the Program; and (iv) supporting operational efficiency improvements in the WSCs through the APAs.

34. The conclusions of the Program economic evaluation remain unchanged for the AF. The estimated net present value (NPV) of Program and AF investments is positive for the Program, i.e., the present value of economic benefits exceeds the present value of economic costs. The estimated economic rate of return (ERR) is 20 percent and is higher than the social opportunity cost of capital of 12 percent.

35. **Fiduciary.** The integrated fiduciary assessment conducted for the Program in 2015 was updated for the three new WSCs, drawing on the experience gained to date to inform the design of the AF and the formulation of DLRs, PIAPs and key performance indicators (KPIs). This assessment covered the areas of financial management, procurement and governance. Paragraph 9 summarizes the status of implementation of FM related actions of the PAP. The AF will ensure that Program financial statements and audit reports, as well as the financial statements and audit reports of WSCs, are made public. It will also ensure that a modern internal audit function is in place in each of the six WSCs. As discussed in Paragraph 10, the procurement system is functioning satisfactorily in accordance with the PAP.

36. The same procurement arrangements will apply for the AF, based on the PPM and SBDs, except for the IPF component. The PMU has adequate capacity to implement the IPF component. Procurement under this component will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers, dated July 2016, revised November 2017, as well as the loan agreement and the procurement plan approved by the Bank. The "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006, updated January 2011, and as of July 1, 2016 shall apply to the IPF component, and "Guidelines on Preventing and Combating Fraud and Corruption in Program-for-Results Financing", dated February 1, 2012, and revised July 10, 2015 shall apply to the Program. A procurement plan for the first 18 months of Program implementation has been prepared and has been approved by the Bank.

37. **The financial management implementation of the IPF component will also be supported by PMU staff, who support the Program for Results (PforR) operation.** This will include budget preparation, preparing for disbursements, maintaining accounting records, reporting and liaising with the external auditor. In addition to the annually audited Program financial statements, Interim Financial Reports (IFRs) for the IPF component will be required on a quarterly basis. A single audit is required for the whole program, including the IPF component.

38. **Environmental and Social.** The overall environmental and social impacts of the AF are expected to be positive and the risks/impacts could be minimized/mitigated through the existing system with some additional measures, including updating of the land standard operating procedures (land acquisition SOP). AF investments are not expected to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people, and measures will be taken to exclude any investments that might entail high environmental and/or social risks to the Program.

39. An addendum has been prepared for the Program's environmental and social system assessment (ESSA – July 2015) to cover the three AF governorates and their WSCs, taking into account: (i) progress in the implementation of measures stipulated in the ESSA and the Program design (as summarized in Paragraph 11); (ii) systems, procedures and capacities of the AF WSCs in managing the environmental and social risk related to AF implementation; and (iii) legislative and procedural changes since 2015 on land acquisition, illegal use of state land, and the environmental assessment system. The Addendum concluded



that the ESSA analysis and conclusions apply to the new geographic coverage of the AF, as the environmental and social context is very similar to the governorates of the Program.

40. Following the fatal accident that occurred on June 5, 2018 at one of the construction sites of the parent Program, and the independent Root Cause Analysis (RCA) investigation carried out with the World Bank support, a ten-item action plan to strengthen the occupational health and safety (OHS) system was recommended, which included, *inter alia*: (i) applying enhanced OHS standards, such as the World Bank Environmental Health and Safety Guidelines, and the United States Occupational Safety and Health Act (OSHA), (ii) strengthening compliance with permits and works supervision standards, and (iii) enhancing training on OHS. The GoE confirmed its commitment to implement the action plan, which is underway. The OHS strengthening measures are included in the Addendum and are integrated in the, PAP, the verification protocol of the DLIs, and the detailed design of the TA component of the AF.

41. **Environmental and Social Impacts of the Technical Assistance Component.** The TA that will be implemented under the IPF component will focus mainly on staffing, consultancies and capacity building related to Program management as well as strengthening the role of the regulatory authority (EWRA) and the financial and tariff model. The TA is classified as category C and triggers the OP7.50 policy as described below.

42. The application of OP 7.50 (International Waterways): OP 7.50 is applicable to the Program as assessed in the ESSA given the nature and location of the interventions. However, the Program and the AF fall within the exception to the riparian notification requirement under paragraph 7 (a) of OP 7.50 since the interventions comprise an ongoing scheme but are of a limited scale and will not adversely change the quality or quantity of water flows to other riparian countries. Overall, the Program will positively impact canals and drains in the Program areas. Egypt is located at the extreme downstream of the Nile River, and the Program interventions will improve the quality of the final reaches of the Nile Delta.

## Risks

43. Annex 3 provides the updated Systematic Operations Risk-rating Tool (SORT). As shown in the SORT, Political, Fiduciary and Stakeholder risks have all been updated to reflect the reduced risks. All other risk ratings have remained unchanged, and the overall risk rating remains Substantial. Risks currently Substantial and those with reduced ratings are discussed below.

44. **Political risk.** The Program is strongly supported by the Government. The AF will benefit from high political commitment as rural sanitation is a flagship Presidential program, therefore the risk has been lowered from Substantial to Moderate.

45. **Fiduciary risk.** The fiduciary risk rating has been lowered from High to Substantial due to: (i) the development of the PPM and SBDs; (ii) establishment of a capacity building hub at the American University in Cairo to train the three new WSCs prior to the effectiveness of the AF loan, in addition to training the three participating WSCs under the parent operation; (iii) training for contractors, and the presence of a complaints handling mechanism for contractors; and (iv) experience gained by the PMU in transferring funds to the WSCs on a timely basis. Remaining risks include the weak capacity of the new WSCs and the absorptive capacity of the market which may cause delays, inadequate quality and higher costs. The annual fiscal grants and performance assessments against specific indicators will pressure WSCs to achieve more efficient service delivery and more prudent financial performance. In addition, predictability

and consistent availability of funding under the Program will help WSCs to achieve target financial indicators. These risks will be managed through assistance from the implementation support consultants (ISCs) and intensive capacity building and training.

46. **Stakeholder risk** has been downrated from Substantial to Moderate based on the Program's experience with decentralized service delivery, whereby WSCs have assumed more responsibility for planning and investment. EWRA will be strengthened in its role of Monitoring and Evaluation.

47. **Institutional capacity for implementation and sustainability risk** remains substantial due to concerns over sustainability of the reforms and the absorptive capacity for implementation. The three new WSCs have lower capacity and buy-in and/or readiness for various reforms. These risks will be mitigated by the support provided through the TA, as well as knowledge exchange between the parent operation and the AF WSCs.

48. **Environment and Social risks** remain substantial. The review of the land acquisition SOPs to reflect the emerging risks and ensuring the adoption and application of the revised SOPs and the improvement of the OHS system will help mitigate these risks<sup>8</sup>.

49. **Technical Design risk** has been downgraded to moderate as the parent operation served as a good pilot where all risks have been identified and proper mitigation measures have been put in place, which would allow for better progress based on lessons learned from the parent operation. Capacity building support remains critical, as the program expands to cover three new governorates and the new WSCs would need strong support, especially during the initial stages. This risk will be mitigated using tools and materials developed under the parent Program to build capacity, while accountability will be strengthened through improved M&E and reporting by EWRA. Also, measures are put in place to ensure that there are no overlaps in the verified HH connections in the two governorates participating in both, the original and AF, and will be specified in the POM.

50. **Other risks** relate to AIIB financing and are rated as moderate. If AIIB financing does not materialize, the Program (SRSSP, plus the AF) will be restructured based on available funding for the Program.

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<sup>8</sup> The revision of the SOP will be led by the PMU. The Bank will offer support as needed. The Bank will approve the revisions of the SOP as stipulated in the DLR under DLI 6.

## V. World Bank Corporate Requirements

51. **Gender.** The parent Program introduced many activities to strengthen citizen participation in the design and implementation of projects; however, in many cases women did not participate as often or as deeply as their male counterparts. In the three governorates, only 21 percent (278 out of 1,299) of the community committee members are female, and during consultation events only 17.2 percent of attendees were female. To address these gaps, further measures will be mainstreamed in the AF and operationalized through the PAP to deepen the gender dimensions of the Program. Planned activities include: (i) creating local women's forums at the governorate level; (ii) setting clear roles for the women's forums and tracking their role in the design and the decision-making processes; (iii) strengthening women's representation in the existing and to-be established Local Community Committees (LCC); and (iv) establishing databases for gender-disaggregated data to monitor gender related indicators (e.g., women beneficiaries and women's involvement in consultation and grievance redress mechanism (GRM)). The Program will track female representation at the LCCs and forums via the dedicated indicator included in the Results framework.

52. At present, only 7.6 percent of WSC staff of the six governorates are women. Under the AF, the WSCs will make an effort to increase female representation in the hiring of staff to work on program-related activities (as noted in the PAP). Career constraints that women face (e.g., lack clarity on paths to promotion to higher levels and hiring criteria that may unintentionally disadvantage or discourage women from applying) will be addressed by, *inter alia*, reviewing HR policies and procedures (e.g. promotion requirements/procedures, HR database procedures), and exploring options for specific training and other empowerment activities for women.

53. **Climate and Disaster Risk Management.** Climate change is expected to cause a decrease in rainfall and related increase in drought conditions in the Nile Delta, as well as sea level rise, which may in turn cause saltwater intrusion. Despite the decrease in average rain fall, climate change is also expected to cause an increasing number of surge rainstorms that may cause urban flooding, as was experienced in the northern Nile Delta in 2015. Climate change may also cause an increase in dust storms and heat waves, which will be associated with additional water consumption for cleansing and cooling purposes. Adaptation co-benefits flow from the design and siting of WWTPs to ensure they will be resilient/able to adapt to any of these changes. Some of the measures that would be taken include: siting new sanitation assets in areas that are not vulnerable to rising sea levels and designing the biological treatment to be more adaptive to higher temperatures. Higher-quality effluents will improve environmental quality as contaminated flows into waterways will be reduced. Better sanitation infrastructure will also significantly improve the resilience of served villages through better drainage of flooding resulting from surge storms, and from the increase of cleansing water used after sandstorms. In short, the resilience of the Program area residents to climate change will be raised significantly by the range of measures adopted under this Program to deal with the increasing water stress and flooding. Mitigation co-benefits could also be achieved through introducing energy saving measures at the utilities, which are expected to gain high momentum from the country-wide energy reforms that are forcing the utilities to pay higher energy prices.

54. Program activities are specifically intended to alleviate these climate vulnerabilities, as sanitation services will improve climate resilience through added drainage capacity to served communities. DLI1 will directly provide drainage capacity to served villages, and the PIAPs under DLI3 include a specific KPI monitoring the number of reported sewage flooding events over each 100 km of the network in a year

(KPI#2). Enhancing measures to reduce or prevent this flooding is an important adaptation measure to address climate change vulnerabilities.

55. The AF will support the achievement of measures to make the water sector more efficient and cleaner, specifically through DLIs 3 and 5. Under DLI3, the PIAPs introduce operational monitoring to meet Egyptian government operational standards for WWTPs. DLI3 also broadly supports improved operational and financial efficiency of WSCs, which is likely to result in the WSCs' more efficient use of energy and a reduction in energy and water losses. Through improving the technical design, purchase of high-efficiency equipment and more efficient operation of the utilities. Based on the experience of similar projects, even a few simple changes to operational procedures could lead to a 10 percent reduction in energy use (especially when these will be backed by strong management commitment in the wake of increase in energy prices), while improving the design of the network<sup>9</sup> and raising the standards of equipment<sup>10</sup> towards more energy-saving technologies could lead to an additional 10 percent of energy use (implying total potential energy savings from improved operation of 20 percent under DLI3). Under DLI5, a National Water and Sanitation Sector Strategy will be developed, informed by various analytical studies. On the water supply front, more efficient water supply will mitigate the impacts of droughts and sandstorms. Furthermore, as part of the analytical work to inform the strategy, studies will be undertaken on environmental impacts, including climate change mitigation and adaptation measures. DLI7 and the IPF component aim to strengthen EWRA in operationalizing a WSS information system for the utilities. These systems will, among other things, enhance the operational efficiency of WSCs—based on the tracking of environmental indicators<sup>11</sup>--aimed at improving effluent quality, raising energy efficiency (as indicated above), reducing sewerage blockage, and non-revenue water losses, and improving emergency drainage after surge storms. More details are provided in Annex 9.

56. **Citizen Engagement.** Under the Program, a number of activities related to citizen engagement are being undertaken in the participating WSCs and in the other related sector agencies. These include the development and implementation of new citizen engagement guidelines (covering information sharing, community consultation, and related activities/procedures), strengthening existing complaints handling hotlines, and establishment of local community committees (LCCs). Program WSCs will rely on (i) the Citizen Engagement Guidelines developed (and updated as appropriate) to strengthen community outreach and engagement; and (ii) the recommended improvements to existing hotlines for complaint handling and grievance redress. The concept of citizen audit and monitoring will be piloted in the AF using mechanisms like the LCCs and will be operationalized through the PAP.

57. The capacity of the three new WSCs for citizen engagement is similar to the capacity of the three original WSCs at the start of the Program. The AF will build on the strong citizen engagement activities and reforms of the Program, and capacity support will be provided to the new WSCs. Cross-fertilization among the targeted WSCs will permit experience sharing to ensure that the designed measures of citizen engagement (e.g., CHM and project-related GRM, and beneficiary feedback) are strengthened and institutionalized in all participating WSCs.

58. The WSCs have made efforts to ensure that the LCCs have representation of vulnerable groups, including women and youth. LCC meetings offer a space for deliberation and open discussion. LCCs are

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<sup>9</sup> The measures that are normally adopted in designing network include the possible use of shallow networks with small pumps at manholes and better design of pump station sumps.

<sup>10</sup> More efficient energy consumption of pumps, blowers, mixers, lab equipment, etc. could achieve considerable energy savings

<sup>11</sup> More emphasis on this is in Annex 6

also an important medium to facilitate land acquisition, raise awareness and help in getting the approvals needed.

### **Grievance Redress**

59. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org).

### Annex 1: Revised Results Framework and Monitoring Indicators

**PDO:** To strengthen institutions and policies for increasing access and improving rural sanitation services in selected Governorates in the Arab Republic of Egypt.

Action	PDO Indicators by Objectives/ Outcomes (Key indicators to measure the achievement of each aspect of the PDO statement)		DLI #	Core (Y/N)	Unit of Meas.	Baseline (2015)	End Target (2023)	Rationale for Changes from Original
Revised	Objective 1: Strengthen institutions for increasing access and improving rural sanitation services in the participating Governorates of Egypt	1. People provided with access to “improved sanitation facilities” under the Program (number, gender disaggregated)		Y	Number  Percentage	0	1,726,665 (862,000) 50%	Scaled up to include new WSCs and new villages
Revised		2. WSC Operating Ratio*	KPI under DLI 3		Percentage	84.3	100	Updated including figures from all WSCs
Revised	Objective 2: Strengthen policies for increasing access and improving rural sanitation services in the participating governorates of Egypt	3. National Water and Sanitation Sector Strategy approved by MHUUC*	5.2		Text	N	National Water and Sanitation Sector Strategy approved	Broadened scope to reflect GoE’s desire to a single sector strategy to ensure full sector reform
New		4. Annual sector monitoring reports produced by EWRA*	7.4		Number	0	3	Added to reflect increased focus on building EWRA’s capacity

Action	Intermediate Results Indicators by Results Area		DLI #	Core	Unit of Meas.	Baseline (2015)	End Target (2023)	Rationale for Changes from Original
Revised	Results Area 1: Improved Sanitation Access	1. New functioning household connections to working sanitation systems (with percentage in satellite areas) <sup>12*</sup>	1		Number Percentage	0	345,317 10	Scaled up to include new WSCs and new villages (167,000 HH connections under parent Program and 178,317 under AF)
Dropped		2. New household sewer connections constructed under the Program*	1			0	(150,000)	Repetitive of the previous indicator.
Revised	Results Area 2: Improved Operational Systems and Practices of WSCs	3. Number of WSCs meeting the yearly minimum set APA standards*	3		Number	0	6	Revised to reflect changes to the APA system and addition of three new WSCs
New		4. Collection efficiency of the participating WSCs*	KPI under DLI3		Percentage	TBD <sup>13</sup>	TBD	New indicator to better capture the performance improvement of the WSCs.
New		5. Efficiency in concluding each procurement process*	KPI under DLI3		Percentage	TBD	TBD	New indicator to better capture the performance improvement of the WSCs.
Revised a) Dropped		6: Citizen engagement (values disaggregated by gender where feasible) a) Grievance mechanism functional	KPI under DLI3 <sup>14</sup>		a) Yes/ no	a) N	a) Y	Third indicator for citizen engagement streamlined to capture main related activities, and to reflect the increased ambition of GoE.

<sup>12</sup> Yearly targets for HH connections – for parent Program: Yr 1 (0); Yr 2 (0); Yr 3 (0); Yr 4 (10,000); Yr 5 (50,000); Yr 6 (100,000); Yr 7 (167,000) – for AF Yr 1 (0); Yr 2 (9,000); Yr 3 (38,000); Yr 4 (120,000); Yr 5 (178,317)

<sup>13</sup> Baselines and targets will be updated and included in the results framework once they are determined as part of the PIAP/APA process, by the end of Year 3.

<sup>14</sup> As part of the PIAP process, WSCs have a target related to grievance redress, namely the percent of complaints resolved within 24 hours

Action	Intermediate Results Indicators by Results Area	DLI #	Core	Unit of Meas.	Baseline (2015)	End Target (2023)	Rationale for Changes from Original
b) Revised				b) Percent <sup>15</sup>	b) TBD <sup>16</sup>	b) TBD	b) CRC will be scaled up to the new WSCs as means for measuring the performance of the WSCs and measure their accountability to citizens.
c) No change			c) Percent	c) TBD <sup>17</sup>	c) TBD		
d) e) f) New			d) Percent	d) 17%	d) 45%	d) e) and f) were added to reflect increased focus on female participation in citizen engagement and social inclusion activities	
			e) Number	e) 0	e) 6		
			f) Number	f) TBD <sup>18</sup>	f) TBD		

<sup>15</sup> The CRC survey will be prepared in Year 1 of the AF for the 6 WSCs, it will be repeated on cycles (TBD). The indicator that should be monitored in the increase percentage of the responsiveness of the WSCs to the citizens.

<sup>16</sup> During the AF preparation, MHUUC was in the process of hiring a consultant for conducting the baseline of the CRC.

<sup>17</sup> Baselines and targets will be updated and included in the results framework once they are determined as part of the PIAP/APA process, by the end of Year 3.

<sup>18</sup> This indicator will look at the female staff working on program-related activities, including staff, including at the PIUs. At this stage, the PIUs have not formed yet and it is not clear what is the number of women in the PIUs. The Bank team will work with MHUUC to ensure that female staff are hired in the PIUs particularly for the functions that will require engaging with local communities and in awareness raising. This indicator will be updated at the stage of formulating the PIUs staffing within a year of the effectiveness of this Program, and the target will be set to a higher level to show a greater representation of female staff.



Action	Intermediate Results Indicators by Results Area	DLI #	Core	Unit of Meas.	Baseline (2015)	End Target (2023)	Rationale for Changes from Original	
Revised		7. Number of WSCs that have trained their staff on the procurement procedures manual, standard bidding documents, and the Complaints Handling Mechanism			Number	0	6	Revised to reflect operationalizing materials developed under the parent Program
Revised		8. Functioning waste water treatment plants in participating governorates operating to Egyptian standard* <sup>2</sup>	3 <sup>19</sup>		Percent	TBD <sup>5</sup>	TBD	Will be updated to include figures from new WSCs. Text revised to reflect that only participating governorates are being monitored.
Revised	Results Area 3: Strengthened National Sector Framework	9. Financial model and tariff structure approved by the MHUUC	8		Text	No	Financial model and tariff structure approved by the MHUUC	Revised to reflect the additional work to be undertaken in this area.
Dropped		10. Creation of a PMU with a mandate for the formulation and coordination of NRSP and the National Rural Sanitation Strategy*	5.1		Yes/No	N	Y	Replaced with another indicator on the National WSS Strategy (PDO Indicator 3)
Revised		11. Implementation of the Standard Operating Procedures for land acquisition under participating WSCs implemented by MHUUC* and inter-ministerial MOU signed	6		Text	No	Y	Revised to capture implementation dimension of the approved land acquisition SOPs.

<sup>19</sup> As part of the PIAPs, WSCs are tracking this percentage of functioning WWTPs.

Action	Intermediate Results Indicators by Results Area		DLI #	Core	Unit of Meas.	Baseline (2015)	End Target (2023)	Rationale for Changes from Original
New		12. A WSS information system is established by EWRA and is functional at the national level	7.3		Yes/No	N	Y	Added to capture WSS information system establishment

\* Defined in the DLI Verification Protocol (Annex 3, SRSS PforR PAD, July 2015)

### Monitoring & Evaluation Plan: Intermediate Results Indicators\*

Indicator Name (#)	Description (Clear definition etc.)	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection	Rationale for Change
IR Indicator 9: Financial model and tariff structure approved by the MHUUC	National and provincial financial model incorporating all revenues & operation/maintenance costs related to service provision. Tariff structures and levels set to ensure affordability and sustainable cost recovery. Models to be interactive, provide five-year projections, and based on good international practice.	Bi Annual	Audited accounts of WSCs	Compilation of audited WSC accounts	EWRA	To deepen sector financing reforms and facilitate increased sustainability of service delivery following period of inflation and currency devaluation
IR Indicator 6(e): Women forums that are established and who participated in project design and/or implementation	Number of women forums created, at any level, to support community communication with the WSCs.	Bi Annual	Decrees of establishing women forums	Decrees of establishing Women forums will be compiled by HCWW and PMU and reported in progress report	PMU, HCWW, and WSCs	Added to allow for increased focus on Women forums, following successes seen in parent Program.

IR Indicator 7: Number of WSCs that have trained their staff on the procurement procedures manual, standard bidding documents, and the Complaints Handling Mechanism	Number of Program WSCs that have trained staff on the procurement procedures manual, standard bidding documents and Complaints Handling Mechanism (all of which were developed under the parent Program).	Annual	Lists of attendees in Program trainings and AUC capacity hub program	Lists of attendees at different trainings compiled by PMU and HCWW	PMU, HCWW, and WSCs AUC Capacity Hub	Following the development of these resources under the parent Program, the aim is now to ensure operationalization under the AF.
IR Indicator 11: Implementation of the Standard Operating Procedures for land acquisition under participating WSCs implemented by MHUUC and inter-ministerial MOU signed.	The SOP was developed under the parent Program, following the definitions outlined in the DLI Verification Protocol. The inter-ministerial MOU will operationalize the revised SOP for use under the NRSP for all relevant ministries	Once	Performance Management Consultant Firm (PMCF)	MOU approved by relevant ministries, as defined in the updated DLI Verification Protocol	PMCF	Following the development of the SOP under the parent Program, the aim is now to ensure it is updated and operationalized under the AF.
IR Indicator 12: A WSS information system is established by EWRA and functional at the national level	The WSS information system will allow EWRA to track sector performance, establish a national benchmarking system, and will include data collection for annual reports.	Once	EWRA	WSS information system established and functional, as defined in the updated DLI Verification Protocol	IVA	Added to reflect expanded priorities under the AF

\* Other indicators are defined in the DLI Verification Protocol (Annex 3, SRSS PforR PAD, July 2015)

## Annex 2: Disbursement Linked Indicators, Disbursement Arrangements and Verification Protocols

**Table 2.1: Extended DLI/DLR Table**

\* Shadowed parts of the table represent the DLI/DLRs added under the AF

Category (including Disbursement Linked Indicator as applicable)	Disbursement Linked Results (as applicable)	Amount of the Loan Allocated (expressed in US\$)	Disbursement Calculation Formula	WB Parent Program (US\$ million)	WB (AF) (US\$ million)	AIB (US\$ million)
(1) DLI #1: Establishment and functioning of at least 345,317 <sup>20</sup> new household (HH) connections to working sanitation systems in villages and satellites of which at least 10% of the connections are in satellites.	DLR #1.1: Final designs completed for at least 92,000 connections	220,000,000	DLR #1.1: \$27,950,000 for final designs completed for at least 92,000 new connections	27.95		
	DLR #1.2 Total of 100,000 new HH connections established in villages.		DLR #1.2 \$1,150 for each HH connection established. Each minimum payment is for \$5,750,000 against 5,000 HH connections established, up to the allocated amount of \$115,000,000.	115		
	DLR #1.3: Total of 67,000 new HH connections established in villages (cumulative new HH connections 167,000).		DLR #1.3: \$1,150 for each HH connection established. Each minimum payment is for \$5,750,000, against 5,000 HH connections established up to the allocated amount of \$77,050,000. No payments will be made until at least 16,700 new HH connections have been established in "satellites".	77.05		

<sup>20</sup> 167,000 HH connections under the Parent Program, and 178,317 HH connections under the AF.

Category (including Disbursement Linked Indicator as applicable)	Disbursement Linked Results (as applicable)	Amount of the Loan Allocated (expressed in US\$)	Disbursement Calculation Formula	WB Parent Program (US\$ million)	WB (AF) (US\$ million)	AIBB (US\$ million)
	DLR #1.4: Final designs completed for at least 100,000 HH connections.	329,250,000	DLR #1.4: \$300 for each connection designed. The minimum payment is \$750,000 for 2,500 connections designed, up to the allocated amount.		30	
	DLR #1.5: All construction contracts awarded for the 25 clusters		DLR #1.5: \$2,970,000 for each of the 25 clusters for which all contracts for construction are awarded.			74.25
	DLR #1.6: Establishment of 100,000 HH connections. <sup>21</sup>		DLR #1.6: \$1,261.80 for each HH connections established. The minimum payment is \$6,309,000 against 5,000 HH connections established, up to the allocated amount.			126.18
	DLR #1.7.1: Establishment of 40,000 HH connections over and above already established 100,000 HH connections. <sup>22</sup>		DLR #1.7.1: \$1,261.80 for each HH connection established above 100,000 HH connections. The minimum payment is \$6,309,000 for 5,000 HH connections established, up to the allocated amount. *No payments will be made until (i) at least additional 8,916 new HH connections			50.472

<sup>21</sup> This DLR and its related disbursement formula are subject to the terms of a co-financing agreement between the Bank and the Co-financier.

Category (including Disbursement Linked Indicator as applicable)	Disbursement Linked Results (as applicable)	Amount of the Loan Allocated (expressed in US\$)	Disbursement Calculation Formula	WB Parent Program (US\$ million)	WB (AF) (US\$ million)	AIBB (US\$ million)
			have been established in satellites out of total of the HH connections established under this Agreement; and (ii) DLR 1.6 has been achieved and allocated amount disbursed.			
	DLR #1.7.2: Establishment of 38,317 HH connections over and above already established 140,000 HH connections. <sup>22</sup>		DLR #1.7.2: \$1,261.80 for each HH connection established above 140,000 HH connections. The minimum payment is \$6,309,000 for 5,000 HH connections established up to the allocated amount. *No payments will be made until (i) at least 8,916 new HH connections have been established in satellites out of total of the HH connections (cumulative of 17,832 of HH connections in satellite villages) established under this Agreement; and (ii) DLR 1.7.1 has been achieved and allocated amount disbursed.			48.348
(2) DLI #2: Annual transfer of Performance-based Capital Grants (PBCG) by MHUUC to eligible WSCs pursuant to the provisions of	DLR #2.1: PBCG has been transferred by MHUUC to eligible WSCs.	40,000,000	DLR #2.1: \$40,000,000 of which \$8,000,000 for each of FY 18, FY 19, FY 20, FY 21 and FY 22	40		

<sup>22</sup> This DLR and its related disbursement formula are subject to the terms of a co-financier's agreement between the Bank and the Co-financier to set out the co-financing agreement for the Program.

Category (including Disbursement Linked Indicator as applicable)	Disbursement Linked Results (as applicable)	Amount of the Loan Allocated (expressed in US\$)	Disbursement Calculation Formula	WB Parent Program (US\$ million)	WB (AF) (US\$ million)	AIBB (US\$ million)
paragraph 6 of Section I.C of Schedule 2 to the Loan Agreement	DLR #2.2: PBCG has been transferred by MHUUC Damietta WSC, Gharbiya WSC, and Menoufia WSC.	32,000,000	DLR #2.2: \$2,666,667 for each Damietta WSC, Gharbiya WSC, and Menoufia WSC for each FY20, FY21, FY22, and FY23 up to the allocated amount.		32	
(3) DLI #3: Design and implementation of the Annual Performance Assessment (APA) system for the WSCs, and WSCs achievement of the required APA weighted index scores in accordance with the Program Operations Manual.	DLR #3.1: Performance Improvement Action Plans (PIAPs) prepared for the three WSCs.	170,000,000	DLR #3.1: \$15,000,000 for FY 18	15	0	
	DLR #3.2: A manual for carrying out the APA of the WSCs has been prepared.		DLR #3.2: \$20,000,00 for FY 18	20	0	
	DLR #3.3 Each WSC has achieved a weighted index of APA Scores in accordance with the Program Operations Manual.		DLR #3.3: \$11,250,000 for each WSC for each of FY19, FY20, FY21 and FY22, up to the allocated amount of \$135,000,000.	135	0	
	DLR #3.4: Performance Improvement Action Plans (PIAPs) acceptable to the Bank prepared for Damietta, Gharbiya and Menoufia WSCs and the existing APA Manual updated to include Damietta, Gharbiya and Menoufia WSCs	150,000,000	DLR #3.4: \$15,000,000			15

Category (including Disbursement Linked Indicator as applicable)	Disbursement Linked Results (as applicable)	Amount of the Loan Allocated (expressed in US\$)	Disbursement Calculation Formula	WB Parent Program (US\$ million)	WB (AF) (US\$ million)	AIBB (US\$ million)
	DLR #3.5: Each of Damietta WSC, Gharbiya WSC and Menoufia WSC has achieved a minimum weighted index of APA scores, in accordance with the POM.		DLR #3.5: \$11,250,000 for each of Damietta, Gharbiya and Menoufia WSCs for each of FY20, FY21, FY22, FY23		135	
(4) DLI #4: Preparation and approval of a new national tariff structure for water and sanitation services by MHUUC to allow for sustainable cost recovery	DLR #4.1: A new national tariff structure for water and sanitation services has been prepared by MHUUC.	50,000,000	DLR #4.1: \$10,000,000 for FY 15	10	0	
	DLR #4.2: A new national tariff structure for water and sanitation services has been approved by MHUUC and decree has been issued.		DLR #4.2: \$40,000,000	40	0	
(5) DLI #5: Establishment of PMU and approval of a National Water and Sanitation Sector Strategy by MHUUC.	DLR #5.1: PMU has been created with a mandate for the formulation and coordination of NRSP and the National Water and Sanitation Sector Strategy	50,000,000	DLR #5.1: \$10,000,000 for FY 15	10	0	
	DLR #5.2: Analytical studies, in accordance with the POM, undertaken to inform the National Water and Sanitation Sector Strategy completed.		DLR #5.2: \$7,000,000	7	0	



Category (including Disbursement Linked Indicator as applicable)	Disbursement Linked Results (as applicable)	Amount of the Loan Allocated (expressed in US\$)	Disbursement Calculation Formula	WB Parent Program (US\$ million)	WB (AF) (US\$ million)	AIBB (US\$ million)
	DLR #5.3: Development and approval of National Water and Sanitation Sector Strategy, in line with good international standards.		DLR #5.3: \$33,000,000	33	0	
	DLR #5.4: Develop an action plan, with timelines acceptable to the Bank, for implementation of the National Water Supply and Sanitation Sector Strategy	12,000,000	DLR #5.4: \$12,000,000	0	12	
(6) DLI #6: Standard Operating Procedures (SOPs) for land acquisition developed under the Program updated by MHUUC acceptable to the Bank approved for implementation.	DLR #6.1: Standard Operating Procedures for land acquisition under NRSP have been approved by MHUUC.	18,625,000	DLR #6.1: \$18,625,000 for FY17	18.625	0	
	DLR #6.2: (i) the SOPs developed under the Program are updated in form and substance acceptable to the Bank; and (ii) an inter-ministerial MOU signed for the implementation of the updated land SOP signed.	9,250,000	DLR #6.2: \$9,250,000	0	9.25	
(7) DLI 7: Strengthen the national regulatory framework for Water and Sanitation. (New).	DLR #7.1: A Ministerial Decree issued by MHUUC to establish a unified WSS Information System (prior result).	31,000,000	DLR #7.1: \$4,000,000	0	4	0
	DLR #7.2.1: Approval of the EWRA business plan by the EWRA Board.		DLR #7.2.1: \$3,000,000	0	3	

Category (including Disbursement Linked Indicator as applicable)	Disbursement Linked Results (as applicable)	Amount of the Loan Allocated (expressed in US\$)	Disbursement Calculation Formula	WB Parent Program (US\$ million)	WB (AF) (US\$ million)	AIBB (US\$ million)
	DLR #7.2.2: Approval of the EWRA's standard business operating procedures by the EWRA Board.		DLR #7.2.2: \$3,000,000		3	
	DLR #7.3.1: Approval by the EWRA Board of a design manual for the WSS Information system, established by EWRA in collaboration with the PMU, for tracking the performance of the WSCs within the Program Area.		DLR #7.3.1: \$3,000,000	0	3	
	DLR #7.4: Annual reports on the performance of the rural water and sanitation sector at the national level published by EWRA.		DLR #7.4: \$6,000,000 for each annual report published each year for FY22, FY23, FY24	0	18	
(8) DLI 8: Approval of a financial and tariff model that allows for sustainable cost recovery of water and sanitation services. (New).	DLR #8.1: Ministerial Decree issued by MHUUC for the development of a financial model for the updating of the tariff structure that allows for sustainable cost recovery of water and sanitation services (Prior result).	20,000,000	DLR #8.1: \$10,000,000		10	
	DLR #8.2: Approval by MHUUC of the financial and tariff model that allows for sustainable cost recovery of water and sanitation services.		DLR #8.2: \$10,000,000		10	
<b>DLIs Sub-total</b>		<b>1,132,875</b>		<b>548.625</b>		

Category (including Disbursement Linked Indicator as applicable)	Disbursement Linked Results (as applicable)	Amount of the Loan Allocated (expressed in US\$)	Disbursement Calculation Formula	WB Parent Program (US\$ million)	WB (AF) (US\$ million)	AIBB (US\$ million)
IPF TA		15,000,000			15	
Front-end Fee (parent)		1,375,000		1.375		
Front-end Fee (AF)		750,000			0.75	0.75
<b>Program Total</b>		<b>1,150,000,000</b>		<b>550</b>	<b>300</b>	<b>300</b>

**Table 2.2: Disbursement-Linked Indicator Matrix**

DLI	Total Financing Allocated to DLI (M USD)	Original DLRs						AF for DLRs							Rationale
		Original DLI Baseline	FY16-18	FY19	FY20	FY21	FY22	AF DLI Baseline	FY19	FY20	FY21	FY22	FY23	FY24	
DLI 1: Establishment and functioning of at least 345,317 HH connections to working sanitation systems in villages and satellites of which at least 10% of the connections are in satellites (revised) <sup>23</sup>	550	220M	DLR 1.1 and DLR 1.2		DLR 1.2		DLR 1.3	329.25M	DLR 1.5	DLR 1.4 and 1.5	DLR 1.4 and 1.5 and 1.6	DLR 1.6	DLR 1.6	DLR 1.7.1 and DLR 1.7.2	Three more WSCs have been added to the Program, effectively doubling the number of HH connections
Amount allocated (M USD)			33.7		51.75		134.55		14.85	15+ 24.75= 39.75	15+ 34.65+ 6.3 =55.95	44.2	75.7	98.8	

<sup>23</sup> The disbursements under DLI 1 are scalable, and are expected to start in FY22 with the majority of disbursements happening towards the end of the Program due to (i) projections for the HH connections constructions; and (ii) higher per connection rate towards the end of the Program (see Table 2.1, Annex 2).

DLI	Total Financing Allocated to DLI (M USD)	Original DLRs						AF for DLRs						Rationale	
		Original DLI Baseline	FY16-18	FY19	FY20	FY21	FY22	AF DLI Baseline	FY19	FY20	FY21	FY22	FY23		FY24
Status of Achievement/ Disbursement			Achieved and disbursed												
DLI 2: Annual transfer of PBCGs by MHUUC to eligible WSCs (revised)	72	40M	DLR 2.1	DLR 2.1	DLR 2.1	DLR 2.1	DLR 2.1	32M		DLR 2.2	DLR 2.2	DLR 2.2	DLR 2.2		The addition of 3 new WSCs.
Amount allocated (M USD)			8	8	8	8	8			8	8	8	8		
Status of Achievement/ Disbursement															
DLI 3: Design and implementation of the APA system for WSCs, and WSCs' achievement of the required APA weighted index scores in accordance with the POM (revised)	320	170M	DLR 3.1 and 3.2	DLR 3.3	DLR 3.3	DLR 3.3	DLR 3.3	150M		DLR 3.4 and 3.5	DLR 3.5	DLI 3.5	DLR 3.5		Revised for easier disbursement through weighted index and addition of three new WSCs.
Amount allocated (M USD)			35	33.75	33.75	33.75	33.75			48.75	33.75	33.75	33.75		
Status of Achievement/Disbursement			Achieved												
DLI 4: Preparation and approval of a new national tariff structure for water and sanitation services by MHUUC to allow for	50	50M	DLR 4.1 and 4.2					0							No change.

DLI	Total Financing Allocated to DLI (M USD)	Original DLRs						AF for DLRs							Rationale	
		Original DLI Baseline	FY16-18	FY19	FY20	FY21	FY22	AF DLI Baseline	FY19	FY20	FY21	FY22	FY23	FY24		
sustainable cost recovery (original)																
Amount allocated (M USD)			50													
Status of Achievement/ Disbursement			Achieved and disbursed													
DLI 5: Establishment of PMU and approval of a National Water and Sanitation Sector Strategy by MHUUC (revised)	62	50M	DLR 5.1		DLR 5.2		DLR 5.3	12M						DLR 5.4		Action plan and timeline development; added task.
Amount allocated (M USD)			10		7		33							12		
Status of Achievement/ Disbursement			Disbursed													
DLI 6: DLI #6: Standard Operating Procedures (SOPs) for land acquisition developed under the Program updated by MHUUC acceptable to the Bank approved for implementation. (revised)	27.875	18.625M	DLR 6.1					9.25M		DLR 6.2						Revision of the SOPs in form and substance acceptable to the Bank; & signature of inter-ministerial MOU for the
Amount allocated (M USD)			18.625							9.25						

DLI	Total Financing Allocated to DLI (M USD)	Original DLRs						AF for DLRs							Rationale	
		Original DLI Baseline	FY16-18	FY19	FY20	FY21	FY22	AF DLI Baseline	FY19	FY20	FY21	FY22	FY23	FY24		
Status of Achievement/ Disbursement			Disbursed													implementat ion of an updated land SOP.
DLI 7: Strengthen the national regulatory framework for Water and Sanitation (new)	31	0						31M	DLR 7.1 and 7.2.1 prior result	DLR 7.2.2	DLR 7.3.1	DLR 7.4	DLR 7.4	DLR 7.4	EWRA strengthening	
Amount allocated (M USD)									7	3	3	6	6	6		
Status of Achievement/ Disbursement																
DLI 8: Approval of a financial and tariff model that allows for sustainable cost recovery of water and sanitation services (new)	20	0						20M	DLR 8.1 prior result					DLR 8.2	Approval of financial and tariff model	
Amount allocated (M USD)									10					10		
Status of Achievement/ Disbursement																
<b>Total Financing Allocated for DLIs:</b>	<b>1,132.875</b>	<b>548.625</b>	<b>155.325</b>	<b>41.75</b>	<b>100.5</b>	<b>41.75</b>	<b>209.3</b>	<b>583.5</b>	<b>31.85</b>	<b>108.75</b>	<b>100.7</b>	<b>91.95</b>	<b>123.45</b>	<b>126.8</b>		
IPF TA Component	0							15M								

DLI	Total Financing Allocated to DLI (M USD)	Original DLRs						AF for DLRs						Rationale	
		Original DLI Baseline	FY16-18	FY19	FY20	FY21	FY22	AF DLI Baseline	FY19	FY20	FY21	FY22	FY23		FY24
Amount allocated (M USD)										3	3	3	3	3	
Status of Achievement/ Disbursement															
Front-end Fee	2.125	1.375	1.375					1.5	1.5 (0.75+0.75)						
<b>Grand Total Financing (parent and AF, incl. AIIB co-financing<sup>24</sup>)</b>	1150	550	156.7	41.75	100.5	41.75	209.3	600	33.35	111.75	103.7	94.95	126.45	129.8	

**Table 2.3: DLI Verification Protocol Table**

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/ agency	Verification on Entity	Procedure
1	Establishment and Functioning of at least 345,317 new HH connections to working sanitation systems in villages and satellites, of which at least 10% of	New HH connection is a connection with a new service contract or amended water supply Contract / Agreement signed between the WSC and the HH listed in these agreements. The HH connection could be a unit or an apartment in a building. The connection starts from the entrance of a building to the public	Yes	WSCs	IVA	Random sampling from a list of new HH connections in villages and satellites provided by the WSC and physical verification of between 150 – 400 connections per Governorate in each verification cycle (sample size

<sup>24</sup> AIIB planned co-financing will be subject to the terms of co-financier's agreement between the Bank and the Co-financier to set out the co-financing agreement for the Program.

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/ agency	Verification Entity	Procedure
	connections are in satellites	inspection chamber to the public manhole including the sewer line. Working sanitation system is a system that is operational based on expected capacity and discharges treated effluent in compliance with Egyptian law or effluent quality standards Law 48. For new HH connections and their working sanitation system an ESIA instrument should be prepared prior to construction, EEAA approval obtained and E&S recommendations included in construction contracts. The working sanitation systems are screened for their E&S eligibility.				determined based on reported outputs).  Contracts for new HH connections will be reviewed to ensure 1) the contract is signed with a selected WSC under the Program, 2) the appropriate E&S measures (ESIA instrument, E&S recommendations, OHS considerations) are included, and 3) measures are put in place to ensure that there are no overlaps in HH connections in the two governorates participating in both, the original and AF, and will be specified in the POM.
2	Annual transfer of Performance-based Capital Grants (PBCG) by MHUUC to eligible WSCs pursuant to the provisions of paragraph 6 of Section I.C of Schedule 2 to this Agreement	WSCs meet minimum requirements: (i) Audited financial statements submitted by WSCs; (ii) submission of annual capital investment plan for the WSC to PMU; (iii) Annual Procurement plan for the WSC in line with the guidelines and procedures provided in the applicable PPM at the time of the implementation of the Program; and (iv) Spend 80% of previous year investment plan of the program	No	PMU /WSCs	IVA	Verify that WSCs have met conditions for receipt of the PBCG, in accordance with the Loan Agreement and Program Operations Manual.
3	Design and implementation of the APA system for the WSCs, and WSCs achievement of the required APA weighted index scores in accordance with the Program Operations Manual	Year 31: (i) Verify 5-Year PIAP prepared for 3 WSCs acceptable to the World Bank and signed off by authorized person in PMU; (ii) Verify procedural guidelines for community engagement are prepared; and (iii) Verify manual for conducting APA acceptable to the World Bank, which contains indicators for four areas, and a description of the weighted index.	Yes	WSCs	IVA	Disbursement will be based on the weighted index, which allow for partial (and over-) completion of targets (up to 120%) and allows for separate disbursements on each KPI and for each WSC.



#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/ agency	Verification Entity	Procedure
4	Preparation and approval of a new national tariff structure for water and sanitation services by MHUUC to allow for sustainable cost recovery	New national tariff structure allowing for economically and socially sustainable cost recovery is approved and decree issued	No	PMU	IVA	100% compliance with eligibility criteria will be required for disbursement
5	Establishment of PMU and approval of a National Water and Sanitation Sector Strategy by MHUUC	National Water and Sanitation Sector Strategy, including Strategic Environmental and Social Assessment, has been approved by MHUUC which contains clear guidance and policy on key areas specified in the Program Operations Manual, as certified in a cover letter from the PMU.  An action plan, acceptable to the Bank, has been developed with clear timelines for implementing the National Water and Sanitation Sector Strategy.	No	PMU	IVA	100% compliance with eligibility criteria will be required for disbursement.
6	Standard Operating Procedures (SOPs) for land acquisition developed under the Program updated by MHUUC acceptable to the Bank approved for implementation.	SOPs are prepared and approved by MHUUC. SOPs have been circulated by MHUUC to the WSCs and all other concerned entities (e.g. HCWW, EWRA) The SOPs developed under the Program will be updated in form and substance acceptable to the Bank in accordance with the core principles of the PforR;  An inter-ministerial MoU is signed for the implementation of an updated land acquisition SOPs.	No	PMU	IVA	100% compliance with eligibility criteria will be required for disbursement.
7	Strengthen the national regulator's (EWRA) capacity, role, and responsibilities (New).	A MHUUC Decree is issued that calls for the establishment of a national WSS information system.  The EWRA Board approves EWRA's Business Plan and its SOPs.	No	PMU	IVA	100% compliance with eligibility criteria will be required for disbursement.

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		<p>The EWRA Board approves the design manual for WSS information system including data definitions, data collection procedures and quality assurance procedures.</p> <p>EWRA operationalizes the WSS information system in accordance with the approved design manual</p> <p>An annual report is published (for the previous FY) that includes a summary of the performance of all WSCs</p>				
8	Approval of a financial model updating the tariff structure that allows for sustainable cost recovery of water and sanitation services. (New).	<p>A MHUUC Decree is published that calls for the development of a financial model for updating the tariff structure that allows for sustainable cost recovery of water and sanitation services.</p> <p>Approval by MHUUC of the financial and tariff model that incorporates best international practices and incorporates considerations for cost recovery and affordability.</p>	No	PMU	IVA	100% compliance with eligibility criteria will be required for disbursement.

**Table 2.4: Disbursement Arrangements (if relevant for multiple sources of financing)**

<b>DLI/ DLR</b>	<b>SRSSP parent Program (USD million)</b>	<b>SRSSP AF (USD million)</b>	<b>AiIB (USD million)</b>	<b>Total (USD million)</b>
DLI 1: Establishment and functioning of at least 345,317 new HH connections to working sanitation systems in villages and satellites of which at least 10% of the connections are in satellites.	\$220	\$30	\$300	\$550
DLI 2: Annual transfer of Performance-based Capital Grants (PBCG) by MHUUC to eligible WSCs pursuant to the provisions of paragraph 6 of Section I.C of Schedule 2 to this Agreement [i.e., the SRSSP Loan Agreement]	\$40	\$32	\$0	\$72
DLI 3: Design and implementation of the APA system for the WSCs, and WSCs achievement of the required APA weighted index scores in accordance with the Program Operations Manual.	\$170	\$150	\$0	\$320
DLI 4: Preparation and approval of a new national tariff structure for water supply and sanitation services by MHUUC to allow for sustainable cost recovery.	\$50	\$0	\$0	\$50
DLI 5: Establishment of PMU and approval of a National Water and Sanitation Sector Strategy by MHUUC.	\$50	\$12	\$0	\$62
DLI 6: SOPs for land acquisition developed under the Program updated by MHUUC acceptable to the Bank approved for implementation.	\$20	\$9.25	\$0	\$29.32
DLI 7: Strengthen the national regulatory framework for Water and Sanitation.	\$0	\$31	\$0	\$31
DLI 8: Approval of a financial and tariff model that allows for sustainable cost recovery of water and sanitation services.	\$0	\$20	\$0	\$20
IPF TA	\$0	\$15	\$0	\$15
<b>TOTAL</b>	<b>\$550</b>	<b>\$300</b>	<b>\$300</b>	<b>\$1,150</b>

### Annex 3: Systematic Operations Risk-rating Tool

#### Systematic Operations Risk-Rating Tool

Risk Category	Original Rating (H, S, M, L)**	Rating from Latest ISR	Current Rating with AF*
1. Political and Governance	Substantial	Substantial	Moderate
2. Macroeconomic	Moderate	Moderate	Moderate
3. Sector Strategies and Policies	Moderate	Moderate	Moderate
4. Technical Design of Project or Program	Substantial	Substantial	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial	Substantial	Substantial
6. Fiduciary	High	High	Substantial
7. Environment and Social	Substantial	Substantial	Substantial
8. Stakeholders	Substantial	Substantial	Moderate
9. Other	Substantial	Substantial	Moderate
<b>OVERALL</b>	<b>Substantial</b>	<b>Substantial</b>	<b>Substantial</b>

\*Rating for the combined Parent and the AF.

\*\*Ratings taken from the Parent PAD and Parent ISR #3 (as not all ratings were included in the PAD).

#### Annex 4: Technical Assessment – Addendum

60. This report is an addendum to the original Technical Assessment conducted during the preparation of the parent operation. Due to the success of the current model under the parent Program, this AF proposes to maintain the current design of the parent Program without changes, while taking into consideration lessons learned.

The purpose of this addendum is to include technical, financial, and institutional assessments, as well as an economic evaluation of the AF Program.

#### Key Lessons Learned from Ongoing Program

61. The Program’s assessment is built on lessons from recent programs and projects (see box 1).

##### Box (1)

#### Key Lessons Learned from the ongoing World Bank funded operations (SRSSP and ISSIP 2)

1. The current model (DLI 1 and 2) under the parent Program is successful in delivering HH connections through the WSCs and providing direct transfer of funds from the MHUUC to the WSCs.
2. Attract the construction industry through appropriate packaging of contracts, awareness raising and dissemination of the new Procurement framework, including the PPM and the CHM.
3. Ensure that the WSCs select good quality consultants for design and construction supervision and devote more time to the design criteria and quality of designs.
4. Promote greater managerial involvement of the WSCs at board level in the implementation of the Program, with attention to DLI3 on Performance Improvements for WSCs.
5. Set a realistic time frame for meeting the deadlines of DLIs/DLRs and make them scalable as much as possible.
6. M&E systems of WSCs should be strengthened to ensure good quality of data and reporting, and to improve decision making, comparability between WSCs, and sector oversight.
7. Specific support to the WSCs is needed to help them develop their five year and annual business plans before the Bank loan for the Program is effective.
8. In light of the economic reform, more attention should be paid to financial modelling and updating the tariffs.
9. The Program Operations Manual (POM) should be prepared and approved before the loan for the Program is effective to ensure that there is clear agreement in different sections on the roles and responsibilities of implementing agencies, along with an outline of the reformed scope at national level.
10. Combining the lending operation with targeted technical assistance from the outset was key to creating capacity. Under SRSSP, technical assistance (TA) through capacity-building support was provided by the WSP during the preparation and implementation stages of the Program to support the GoE in its reform efforts.

62. The NRSP will cover 4,700 villages and 27,000 satellites at an estimated cost of EGP100 billion (US\$14 billion). The initial focus of the NRSP is to cover 769 “polluting villages” at an estimated cost of

EGP20 billion (US\$2.8 billion) in seven governorates in the Nile delta where untreated or inadequately treated wastewater is discharged into the Al Salam & Rosetta Branch waterways.

### **Technical Soundness**

63. The proposed AF will provide US\$300 million from the World Bank; an additional US\$300 million is expected to be approved by the AIIB in late September 2018. The Program will be implemented in the three new Governorates of Gharbiya, Menoufiya and Damietta as well as two of the Parent Program Governorates (Dakhaliya and Sharkiya). There will be an embedded TA of US\$15 million for an IPF component in the AF, which makes this a hybrid operation. An amount of US\$50 million will be devoted to improving the performances of the WSCs.

64. The Program is assessed as technically sound. The selection of villages is based on reaping economies of scale for wastewater treatment systems by clustering villages. Detailed Master Plans at the level of the WSCs include prioritization criteria, detailed costing, and technologies. The PforR also addresses another crucial area - the conformity of water and wastewater facilities to the Egyptian laws, regulations, and codes. The Program is expected to address some current technical weaknesses, including in project preparation, technology selection, procurement and contract management.

65. An amount of US\$535 million will be used to build approximately 178,317 HH connections, as well as construction/rehabilitation of WWTPs and pumping stations. In the five Governorates of Gharbiya, Menoufiya, Damietta, Dakahliya, and Sharkiya, the total number of villages in the command area that pollute the Al Salam Canal and the Rosetta Branch were first identified by HCWW and WSCs and filtered with master plan units of each WSC. A second criterion was to exclude villages in clusters that depend on WWTPs under construction by central agencies to avoid any delay. The application of these criteria allowed the selection of 107 villages in the three Governorates of Gharbiya, Menoufiya and Damietta (639,135 people) for an estimated cost of US\$377 million. To utilize the available budget, 26 villages in the parent Program governorates of Sharkiya and Dakahliya (252,514 people) are proposed to be added for an estimated cost of US\$158 million. These villages were identified under the parent Program as a second priority.

## Program Description

66. **AF.** The AF of the Program will support the NRSP in three additional governorates: Menoufiya, Gharbiya and Damietta, as well as some villages in Dakahlia and Sharkia governorates which were part of the parent Program. These governorates were selected because they have many unserved settlements that contribute highly to the discharge of untreated waste water into the Al-Salam Canal and the Rosetta branch.

**Table A4.1: Expected Investment Budget for the AF**

Governorate/WSC	Gharbiya	Menoufiya	Damietta	Sharkiya	Dakahliya	Grand Total
Number of unserved polluting villages for AF)	26	69	12	13	13	133
Total Population to be served by PforR (WSC)	162,365	405,500	71,270	97,463	155,067	891,667
Number of connections PforR (WSC)	32,473	81,100	14,254	19,492	30,9960	178,317
Total cost in M EGP	1,656	4,136	855	1,170	1,628	9,449,402,980
Total cost in M US\$	94	234	48	66	92	535
Unit cost in EP/Capita	10,508	7,947	13,768	13,352	10,321	10,313
Unit cost in US\$/Capita	584	441	765	742	573	573
Cost of HHC in EP	52,542	39,734	68,838	66,762	51,603	51,565
Cost of HHC in US\$	2,919	2,207	3,824	3,709	2,867	2,865

*Note: This average unit cost of US\$573/capita that include collection system and treatment is consistent with unit cost of the parent program US\$600/capita.*

## Capacity Assessment

67. Below is an analysis of the experience of the three new WSCs in investment planning and implementation.

68. **Gharbiya.** The Gharbiya WSC has been in charge of capital investment planning in donor funded projects of the ISSIP and Integrated Water and Sanitation program (IWSP). The Rural Sanitation Unit (RSU) and PIU for this project are under the O&M Department. The RSU comprises three full-time technical staff, in addition to financial, procurement, social and environmental specialists who are part-time. The IWSP PIU comprised four technical and three financial full-time staff, in addition to a part-time procurement specialist responsible for design review, tendering, evaluation of contractors and consultants. The company is in the process of hiring 60 staff. In FY 2017 a total of EGP84 million was disbursed under IWSP, while EGP18 million has been disbursed under ISSIP. The estimated total investment plan for five years for Gharbiya is US\$1.4 million.

69. **Menoufiya.** Menoufiya has been implementing ISSIP2 well. The RSU comprises eight staff: three technical, one financial, two social, one environmental, and one Health and Safety. Disbursement under the project for 2017 was EGP57 million.

70. **Damietta.** Damietta has been involved in capital investments under IWSP with two staff (one technical and one financial). The unit is currently being strengthened due to slow progress; only a total of

EGP32 million has disbursed since the beginning of the project in 2012. The leadership of the Damietta WSC has a good vision for the company moving forward, however more staff are needed.

71. The systems and skills needed for contract management of large scale works have not been developed because the mandate of the WSCs has been limited to operations and small maintenance related works. While relying on consultants for detailed design and construction management services is likely to lead to timely, robust and dependable contract management, there is a danger that the WSCs will not build up capacity to continue once the donor-funded projects stop. Similar project management support arrangements, such as PIUs from other projects, report that WSC staff that are capacitated often either leave for better paid work or are transferred to other departments within the WSC. These risks can be partly mitigated through employing staff that are based in the governorate, using non-monetary rewards, such as providing a good working environment, training and flexible working conditions, especially for women.

72. **PMU.** The Ministry of Housing, Utilities and Urban Communities (MHUUC) was established through law 164/1996 with a mandate that includes responsibility for comprehensive development, including urban, social, and economic development. Since 1980, MHUUC has delegated its mandate to its constituencies, such as the Cairo and Alexandria Potable Water Organization (CAPWO), NOPWASD, HCWW, etc. Because of the high priority given to the sector due to persistent issues such as water scarcity and rural sanitation, the MHUUC has decided to reclaim its role and mandate by establishing a PMU to pilot a set of reforms to improve sector performance.

73. The PMU was established during the parent Program in the office of the MHUUC with a mandate to take the NRSP and Strategy forward, while reporting directly to the Office of the Minister. The PMU has been instrumental in supporting the Program and coordinating between the WSCs in project management, technical, social, environmental, financial, and procurement related activities. The PMU has been successful in its intervention in the sector, yet it remains a project-based entity within the MHUUC. Due to the growing role of the PMU in expanding the reforms to all 25 WSCs, and the need to sustain its role in the long term, the PMU needs to evolve as a sustained entity within the MHUUC or another alternative. This is to provide a solution to the main issue, which is maintaining the high caliber staff that the PMU has hired and retained since its establishment.

74. **EWRA** was expected to play a key role under the parent Program in M&E of WSCs. However, this was not feasible at the time, given its low capacity and struggle to retain qualified staff, and due to the lack of a high-quality M&E system. Thus, it was recommended to create a new WSS information system to gather all stakeholders and incorporate data collection from all 25 WSCs in Egypt (using a standardized data collection, analysis and reporting system).

75. It is critical that EWRA capacity is strengthened to play its intended role in terms of monitoring and benchmarking the WSCs, providing incentives for performance improvement, and determining tariffs based on a sustainable cost-recovery financial model. The current regulatory model and operator financial model place unusually high political stress on EWRA, because pricing is through a political process where EWRA lacks formal authority.



## Financial Assessment

**76.** This section analyses the historical financial situation of the three WSCs (i.e., Gharbiya WSC (GWSC), Menoufiya WSC (MWSC) and Damietta WSC (DWSC)) during the period 2012/2013 to 2016/2017, with special reference to profitability.

**77.** GWSC was established in 2004 as the sole provider of water and wastewater services in Gharbiya Governorate. Key financial and commercial data, covering the period 2012/13 to 2016/17, reveal a weak, but improving financial position, emphasized by the following;

- The company witnessed a decreasing loss in cubic meters of water sold, reaching EGP0.19 per cubic meter sold in 2016/17; however, it experienced some deterioration in unaccounted for water, which reached 25 percent in 2016/17 from 18 percent in 2012/13.
- Gharbiya WSC had negative earnings before interest and taxes (EBIT) and net profit margin over the years. However, financial profitability improved significantly, in that the company was able to cover O&M costs from operational revenues in the last two years. It should be noted that salaries and electricity represent more than 85 percent of total costs, and tariff revenue represents around 75 percent of total operating revenue in 2016/17.
- The company was able to recover operating expenses from operating revenues (operation ratio) in 2016/17 in the water activity and was capable to recover 99 percent of expenses in the wastewater activity, which indicates a significant improvement.
- There is room for improvement in collections, as indicated by the collection efficiency ratio.

**78.** MWSC was established in 2007 as the sole provider of water and wastewater services in Menoufiya Governorate. Key financial and commercial data, covering the period 2012/13 to 2016/17, reveal a weak, but improving financial position, emphasized by the following;

- The company witnessed a decreasing loss in cubic meter sold reaching EGP 0.13 per cubic meter sold in 2016/17; however, it experienced an improvement in unaccounted for water to reach 20 percent in 2016/17 from 27 percent in 2012/13.
- MWSC has a negative EBIT and net profit margin over the years. However, the financial profitability has improved significantly, as the company was able to cover O&M costs from operational revenues in the last two years. It should be noted that salaries and electricity represent around 85 percent of total costs, and tariff revenue represented around 83 percent of total operating revenue in 2016/17.
- The company was able to recover operating expenses from operating revenues (operation ratio) in 2016/17 in both the water and wastewater activities, which indicates a significant improvement.
- There is room for improvement in collections, as indicated by the collection efficiency ratio. Collection rates are acceptable in the domestic sector, and but should be addressed in the government sector, where they are extremely low.

**79.** Damietta WSC was established in 2004 as the sole provider of water and wastewater services in Damietta Governorate. Key financial and commercial data, covering the period 2012/13 to 2016/17, reveal a weak, but improving financial position until 2015/16. Damietta WSC then faced another deterioration in 2016/17. The key points to be emphasized are:

- The company witnessed a decreasing loss in cubic meters of water sold, reaching EGP0.31 and EGP0.81 per cubic meter sold in 2015/16 and 2016/17, respectively. However, it experienced improvement in unaccounted for water to reach 22 percent in 2016/17 from 29 percent in 2012/13.
- DWSC has had negative Gross Operating Profit , EBIT and net profit margin over the years. However, financial profitability has improved gradually till it reached 88 percent cost recovery of operating expenses from operating costs; this ratio decreased to 64 percent due to the removal of the New Damietta plant. It should be noted that salaries and electricity represent around 82 percent of total costs, and tariff revenue represented around 87% of total operating revenue in 2016/17.
- The company was not capable of recovering operating expenses from operating revenues (operation ratio) in 2016/17 in both the water and wastewater activities; however, as indicated earlier, it was witnessing improvement, with the exception of 2016/17.
- There is room to improve domestic collection rates, while government sector collection rates are acceptable.

**80.** In this respect, the following apply to the three WSCs:

- The prevailing O&M costs do not reflect the real needs of the WSCs, with special reference to expenses on preventive and operational maintenance, electricity expenditure and salary levels. In this respect, both the optimal O&M to ensure high quality services to customers, and their implication on future financial performance, should be analysed.
- The water sector witnessed a number of tariff increases, of which the boldest was the last tariff scheme implemented effective September 2017. It is believed that there is a positive relation between tariff increase and the capacity to improve technical and commercial efficiency.
- There is room to improve unaccounted-for water. This requires ensuring proper measurement of both technical and commercial losses and designing capacity building programs to address both.
- Collection rates could be improved to generate cash to meet operating obligations in time.

### **Expenditure Framework**

79. The Parent Program identified the NRSP as the Government program which remains unchanged. The overall goal of the NRSP is to achieve 100 percent sanitation coverage of 4,740 villages and about 27,000 “satellites,” with an estimated population of 50,660 million (acc. to the CAMPAS 2017). The investment needs of the NRSP have been estimated at EGP200 billion (US\$12 billion). By the end of FY18, the total served villages will reach 1,047 villages with an estimated population 17.59 million, including 190 satellites. By the end of FY20, the total served villages will reach 2,086, as currently 1,039 villages are under implementation.

80. The portion of the of the Government program supported by the Parent operation with an amount of US\$550 million included three Governorates (Beheira, Dakahliya and Sharkiya) that contribute to the discharge of untreated waste water and sludge to the Al-Salam canal and Rosetta branch. The Parent operation disbursed US\$288.45 million as of August 2018. The total Government investments, during the period from 2015 to date, in the three Governorates covered by the Parent operation reached US\$275 million which exceeded the GoE projected financing.

81. The AF will build on the Parent operation to include villages in three new governorates (Damietta, Gharbiya and Menoufiya) in addition to villages in the Governorates of the parent operation that are eligible based on the set criteria.

#### Investment program and O&M Expenditure

82. It should be noted that this investment program is indicative and requires field activities to conduct proper cluster optimization, to be followed by technical and financial pre-feasibility, in order to identify priorities for investment. In this respect, allocation can differ by WSC or by year, depending on the results of the proposed cluster optimization and pre-feasibility studies. In addition, investments will be prioritized on the basis of criteria to be developed further.

**Table A4.2: Indicative Investment Budget Projection (EGP thousand/US\$ million)**

Governorate	FY 20	FY 21	FY 22	FY 23	Total Cost in EGP'000	Total Cost in US\$ M
Gharbiya	231,830	386,383	463,660	463,660	1,656	94
Menoufiya	468,326	780,544	936,652	936,652	4,136	234
Damietta	154,266	257,110	308,532	308,532	855	48
Sharkiya	423,124	705,207	846,248	846,248	1,170	66
Dakahlia	139,865	233,108	279,729	279,729	1,628	92
<b>Grand Total (EGP Thousand)</b>	<b>1,417,410</b>	<b>2,362,351</b>	<b>2,834,821</b>	<b>2,834,821</b>	<b>9,449,403</b>	
<b>Grand Total (US\$ Million)</b>	<b>79</b>	<b>131</b>	<b>157</b>	<b>157</b>		<b>535</b>

83. The tables below provide indicative O&M expectations weighed against self-generated funds (tariffs and other operating revenues) for each WSC in order to identify funding gaps.

**Table A4.3: O& M Expected Funding Gap-Gharbiya WSC**

GWW	FY 18	FY 19	FY 20	FY 21	FY 22
W Tariff	414,588,547	476,776,829	533,990,049	598,068,855	657,875,740
WW Tariff	155,263,811	166,132,278	177,761,537	190,204,845	203,519,184
Other Operating Revenues	85,477,854	96,436,366	106,762,738	118,241,055	129,209,239
<b>Self-Generating Sources</b>	<b>655,330,212</b>	<b>739,345,473</b>	<b>818,514,324</b>	<b>906,514,754</b>	<b>990,604,163</b>
W Cost	349,093,438	418,912,125	502,694,550	603,233,460	723,880,152
WW Cost	189,862,992	227,835,590	273,402,708	328,083,250	393,699,900
<b>Total O&amp;M</b>	<b>538,956,430</b>	<b>646,747,716</b>	<b>776,097,259</b>	<b>931,316,710</b>	<b>1,117,580,052</b>
<b>Funding Gap</b>	<b>116,373,782</b>	<b>92,597,758</b>	<b>42,417,065</b>	<b>(24,801,956)</b>	<b>(126,975,890)</b>

**Table A4.4: O& M Expected Funding Gap-Menoufiya WSC**

MWW	FY 18	FY 19	FY 20	FY 21	FY 22
W Tariff	438,406,782	504,167,799	564,667,935	632,428,087	695,670,896
WW Tariff	104,998,027	112,347,888	120,212,241	128,627,098	137,630,994
Other Operating Revenues	81,510,721	92,477,353	102,732,026	114,158,278	124,995,284
<b>Self-Generating Sources</b>	<b>624,915,530</b>	<b>708,993,041</b>	<b>787,612,202</b>	<b>875,213,462</b>	<b>958,297,174</b>
W Cost	387,916,735	465,500,082	558,600,099	670,320,118	804,384,142
WW Cost	108,706,806	130,448,167	156,537,801	187,845,361	225,414,433
<b>Total O&amp;M</b>	<b>496,623,541</b>	<b>595,948,249</b>	<b>715,137,899</b>	<b>858,165,479</b>	<b>1,029,798,575</b>
<b>Funding Gap</b>	<b>128,291,988</b>	<b>113,044,791</b>	<b>72,474,303</b>	<b>17,047,983</b>	<b>(71,501,401)</b>

**Table A4.5: O& M Expected Funding Gap-Damietta WSC**

DWW	FY 18	FY 19	FY 20	FY 21	FY 22
W Tariff	162,204,455	186,535,124	208,919,338	233,989,659	257,388,625
WW Tariff	34,508,671	36,924,278	39,508,977	42,274,606	45,233,828
Other Operating Revenues	29,506,969	33,518,910	37,264,247	41,439,640	45,393,368
<b>Self-Generating Sources</b>	<b>226,220,095</b>	<b>256,978,312</b>	<b>285,692,563</b>	<b>317,703,905</b>	<b>348,015,821</b>
W Cost	185,562,776	222,675,332	267,210,398	320,652,478	384,782,973
WW Cost	133,217,692	159,861,230	191,833,476	230,200,171	276,240,205
<b>Total O&amp;M</b>	<b>318,780,468</b>	<b>382,536,562</b>	<b>459,043,874</b>	<b>550,852,649</b>	<b>661,023,178</b>
<b>Funding Gap</b>	<b>(92,560,373)</b>	<b>(125,558,250)</b>	<b>(173,351,311)</b>	<b>(233,148,744)</b>	<b>(313,007,357)</b>

84. Once operating and financial improvements are achieved gradually and with the proposed tariff increase scheme, beginning FY 2017/18, Gharbiya and Menoufiya WSC will start surpluses, while Damietta is expected to witness funding deficits during the coming five years. However, it should be noted that O&M does not include depreciation and that they are projected based on 20 percent annual increase, as such increases would allow for optimal O&M.

85. Not only do the WSCs need to finance O&M, but they also require some funds to enable them to improve their indicators, e.g., measurement capacity for non-revenue water, collection systems and capacity. In this respect, it is foreseen that 10 percent of the investment expenditure could be allocated to O&M.

### Monitoring & Evaluation

86. There are several existing M&E processes that are already being used in the sector, the main ones being:

- MARS (Monitoring, Analysis and Reporting System) used by the WSCs to report their performance to HCWW; this covers the 16 WSC KPIs.
- Monthly reports by the external auditor that sits permanently within each WSC.
- The M&E tool being developed by German International Development Organization (GIZ) as part of the Waste Water Decision Support System (WWDSS) to monitor the planning and implementation of projects.
- The Annual Information Reports (AIR) prepared by EWRA that cover the numerous KPIs of WSC performance measured by EWRA.

87. The PMU-MHUUC is developing a new unified M&E system in which responsibilities and reporting obligations will be discussed thoroughly with all stakeholders (PMU-MHUUC, HCWW, EWRA, WSCs).

### Economic Analysis

88. Projected annual economic benefits are compared with expected annual economic operation costs (OMEX), in order to arrive at annual net benefits for the Program. Net benefits are discounted over the expected life of the Program through the Discounted Cash Flow (DCF) method at the social discount rate (12 percent in real terms), in order to derive the following key economic indicators during the study period (2018-2042) as shown in Table A4.6.

**Table A4.6: Economic Viability Indicators**

Indicator	Program	Interpretation
Economic Net Present Value (ENPV) (EP Million)	4,165	Net economic benefits exceed economic CAPEX
Economic Rate of Return (ERR)	20 percent	ERR exceeds social discount rate (12 percent)

89. The above table indicates that ENPV is positive for the Program, i.e., the PV of economic benefits exceed the PV of economic CAPEX and ERR (20 percent) is higher than the social opportunity cost of capital (12 percent), indicating that the Program has positive economic return.

90. The above economic indicators show that the Program is economically viable.

### Recommendations

91. The key recommendations of the technical assessment are summarized below.

#### 1. Institutional:

- a) Replicate the SRSSP parent Program in the three new WSCs, which means the new WSCs will be responsible for the preparation, implementation, supervision, and monitoring phases of the Program, including performance improvement and O&M.
- b) Assign sufficient and experienced staffing with clear terms of reference (TORs) and responsibilities at the WSC level to implement the Program and provide tailored hand holding.
- c) Strengthen the EWRA, including a unified M&E system, through the establishment of a unified WSS information system building on existing tools, that serves all users (PMU, HCWW, EWRA, WSCs).
- d) Need for HR reform to allow for better working conditions and compensation at the water and sanitation sector level.
- e) Institutionalizing the MHUUC/PMU role within the sector, ensuring the long-term sustainability of the overall management and coordination role.
- f) Further strengthen autonomy of the WSCs through full decentralization of planning, investment and O&M functions, as was begun under the Program.

**2. Technical:**

- a) Support the WSCs to realize technical pre-feasibility studies for identified sub-projects, based on cluster optimization and options development approach, in order to verify location, population, access roads, topography for sewer collection, land availability, etc.
- b) Support the decision of the MHUUC in creating Construction Departments in WSCs to oversee project-related activities and future investment projects in WSCs.
- c) Ensure better quality data that will support the WSS information system and inform the preparation of the PIAPs, as will be required under the updated legal agreement.

**3. Financial:**

- a) Modernize WSCs' financial systems and tools to improve bill collection and processing, and transparency to further support WSC operational efficiency and long-term financial sustainability.
- b) Develop a financial model to monitor sustainability based on self-generated revenues.
- c) Assess financial viability of individual investments and prioritize investments based on pre-selected well defined technical, financial and economic indicators.

## Annex 5: Fiduciary Systems Assessment – Addendum

92. The AF will scale up the Program to three additional governorates through their respective WSCs, deepen the institutional and sector reform agenda to further consolidate utility decentralization, and scale up some of the existing DLIs.

93. **Previous experience in the sector through the ISSIP projects identified extremely lengthy and inefficient paths for the flow of funds as a serious implementation constraint.** The flow of funds (World Bank, NOPWASD, HCWW/PMU, WSCs/RSU, contractors) and corresponding flow of documentation from WSCs back through the same channels resulted in high transaction costs. Implementation delays were noted at several operational levels and payment processing was no exception. Significant delays in processing contractors' invoices (in some cases contracts allowed 28 days for invoice payment vis-a-vis 54 days in practice) were caused by opaque controls and lack of streamlined processes (inefficient reviews, correspondence, and approval steps). The Program is designed to enable more efficient flow of funds and information across the implementation units/departments through reducing the flow of transaction documentation across entities, while requiring periodic reporting, monitoring progress indicators, and exercising independent verification.

### Lessons learned from the first phase

94. It is still premature to fully capture lessons learned at this stage of implementation, although some early signals could be identified so far. As envisaged by the Program design, WSCs have started to assume responsibilities beyond their traditional activities. The WSCs have proceeded with planning capital investments and managing the related procurement processes.

95. Initiating the practice of performance based fiscal transfers to WSCs is a significant milestone to enhance the predictability of funding and investment planning at the WSC level. However, transfers have been made from the Ministry of Housing to the WSCs with delays compared to the timeline envisaged per the DLI structure, resulting in failure to achieve the respective DLRs in a timely manner, and to the eventual restructuring of the Program. According to the Program financial statements of June 2017, only the equivalent of about US\$6 million was transferred to the WSCs. These transfers were still held at the WSCs' bank accounts as of June 2017. The "Progress Report" as of December 2017 has showed some incremental progress, resulting in cumulative transfers reaching US\$11 million. The latest financial update by the PMU showed cumulative transfers of US\$26.6 million by the end of February 2018.

96. As per the HCWW progress report of June 2017, identification of villages and satellite service methodology were discussed and agreed at a workshop in March 2017. The enforcement of this methodology should be monitored and reported on periodically to ensure that the selection process is not influenced by factors beyond the approved methodology.

97. The audit reports of FY16 were published by WSCs on their respective websites. However, the published audits were not complete. The Bank alerted the PMU to the incomplete status and will monitor its resolution in the upcoming publishing of the FY17 report.

98. Although procurement experienced a series of challenges earlier, which caused delays in the selection of the PMFC, IVA, and ISCs, a lot of progress has been achieved recently in implementation and the procurement system that was included in the assessments during preparation of the Program is now functioning in accordance with the PAP.

99. Procurement implementation arrangements are operating at an acceptable level. The PPM and SBDs are adopted and are being used by the three WSCs after being trained on the use of the PPM and the SBD. The GoE has also opted to scale up the reform beyond Program design by adopting the PPM and SBDs for all WSCs. The PPM has been also updated to address the lessons learned from initial applications and to address the need to move faster to the award stage. The CHM is also developed but a remaining challenge is to put it to use and to appoint the Independent Panel members.

100. To speed up implementation, additional trainings on procurement and contract management were also provided to the WSCs and PMU teams. In addition, an information meeting for bidders was organized in order to attract more qualified bidders and motivate established contractors and consultants to bid on SRRSP contracts by guaranteeing them that they will enter into fair and balanced contracts which will be professionally administered and with prompt payments.

101. A procurement spot check to assess the viability of reforms in terms of implementation included in the PforR found that while there was a delay in procurement implementation at the beginning, WSCs are making good progress in terms of procurement planning and implementation, updated procurement plans are available, and contracts are awarded in accordance with the PPM using the SBD within an acceptable timeframe. The procurement spot check recommends the following:

1. Continuous hand-holding support is to be made available for the new WSCs ahead of commencement of tendering operations for the AF. This is necessary to avoid protracted delays.
2. Orientation sessions for bidders are to be held at the launch of the AF in order to inform the construction and consultancy industries of the business opportunities offered by the AF, and thereafter to establish a periodic dialogue with the market regarding the strategic and technical directions of the water and waste water sector in Egypt as well as current and future business plans.
3. The number of technical and evaluation committees be restricted to the minimum necessary for effective execution of the evaluation process.
4. The PMCF should act as a secretariat for bid/proposal evaluation committees in order to serve as a further check on the quality and accuracy of the evaluation process and the corresponding bid/proposal evaluation reports.
5. Strengthening the WSCs' capacity by further recruitment of at least one senior procurement and one senior contract administration specialist in each WSC.

#### **IPF component of the AF**

102. **The PMU will implement IPF-related activities pertaining to the financial management, safeguards, procurement and overall coordination.** The PMU has adequate capacity to implement the IPF component and a procurement plan has been developed for this component. Procurement under this component will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers, dated July 2016 and revised November 2017, the loan agreement, and the procurement plan approved by the Bank. The "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006, and updated January 2011 and as of July 1, 2016 shall apply. A procurement plan for the first 18 months of project implementation has been prepared and has been approved by the Bank.



103. For FM responsibilities, the FM staff at the PMU will be in charge of budget preparation, preparing withdrawal applications for disbursements, maintaining accounting records, reporting and liaising with the external auditor. There will be no advance for this IPF component. Disbursements will use traditional SOE based withdrawal applications to be submitted quarterly. Disbursement methods include reimbursement and direct payment. Interim Financial Reports (IFRs) for the IPF component will be required on a quarterly basis, in addition to the annual audited Program financial statements. A single audit is required for the whole Program, including the IPF component. This is a separate audit of the Program financial statements, incorporating the Program related activities carried out by WSCs.

104. As the fiduciary system assessment (FSA) was updated, the following risks and constraints were identified:

1. Inconsistent application of rules and procedures.
2. Lack of performance information, linked to an inability to collect and interpret data.
3. Lack of accountability mechanisms such as functioning complaint and grievance mechanisms.
4. Issues associated with the quality of Designs & Specifications, and accuracy of cost estimates.
5. Issues associated with contract management, such as non-performing contractors and weak contract supervision.
6. The flow of funds from the state budget to WSCs has experienced significant delays.
7. The new program design, in which WSCs are to implement large capital investments, is still being tested.
8. The KPIs involving financial performance and collection efficiency increase the reporting risks.

105. **The overall fiduciary risk for the Program has been assessed as substantial.** While mitigating measures were identified to strengthen the fiduciary systems and address gaps through the PAP, the overall fiduciary risk for the Program has been determined as Substantial.

106. As a result of the identified weaknesses and constraints, the key performance indicators associated with the actions required to mitigate the above risks are described below:

- PMCF (either by extending the scope of services of the current PMCF or by identifying and hiring another firm) and ISC have to support the three new entrants under AF.
- PPM and SBDs and Complaints Handling Mechanism (CHM) should be adopted by the three new WSCs and procurement staff trained.
- Maximum lead time is set up for transactions approval and payments processing, per the operations manual in the new WSCs.
- A modern internal audit function should exist in the WSCs to contribute to a systematic and disciplined approach to evaluate and improve the effectiveness of governance, risk management and control processes.
- Annual financial reports should be publicly available through the website.
- Automated accounting information systems are functioning in the three new WSCs.

107. Other required actions to be included in the PAP:

- Disseminate and promote the Complaints Handling Mechanism (CHM) which was developed under phase one.

- Ensure that all bidding requests, bidding documents, bid evaluation results, including on direct contracting, parent and final contract amounts are advertised in the GoE e-portal: [www.etenders.gov.eg](http://www.etenders.gov.eg)

Other required actions:

- Agree on procurement performance indicators and start collecting and analyzing data.
- Ensure quality and completeness of Designs and Specifications, including reliable and accurate of cost estimates.
- Verify and confirm the technical and financial qualifications of contractors. It has been agreed that the MHUUC will send a clear message to all WSCs that during the technical evaluation stage, the bidders' qualifications must be verified. Qualification criteria, including minimum financial and technical requirements, as well as past performance, are to be applied. Bidders that do not comply with the qualification requirements will be rejected at this stage.
- Ensure quality of consultants selected for preparing designs and specifications, as well as construction supervision.
- The formation of a construction department in all WSCs is a welcome initiative which will be critical to ensure institutional capacity building and sustainability of the WSCs.

#### ***Fiduciary Practices (processes and procedures)***

108. **Procurement rules and procedures are considered broad and not always sufficiently clear for consistent application.** Although based on mandatory and enforceable rules set out in the WSCs PPM, it is considered that these rules and procedures allow too much room for individual interpretation that results in inconsistent application across and within WSCs. While advertising of bidding opportunities is required under the open competition, it is not under other procurement methods, such as single source and limited competition. These other procurement methods are clearly described in the PPM. It should be noted that the procurement method is determined by the estimated cost. The conditions for the use of different procurement methods is specified in the PPM.

109. WSCs do not have SBDs for all procurement activities. However, while there are some unified documents and templates for the purpose of advertisements through contracts/purchase orders, it is considered that there is a lot of room for improvement. Qualification, evaluation, and award criteria are not sufficiently clear. In addition, it is considered that contract conditions can be improved to achieve a more equitable balance between employer and contractor rights and obligations.

110. In order to assess weaknesses and constraints in the WSCs' procurement practices, among other things, information was requested on the number, type (Goods, Services & works), the procurement method (open competition, direct contracting, etc.,) and contract amounts in the last 3-5 years. Financial management practices were assessed based on the review of budget and accounting processes, as well as the review of WSCs' financial statements.

111. Damietta WSC. In 2012/2013, Damietta WSC issued 369 purchase orders (POs) for Supplies and Goods, in 2013/2014 it issued 402 POs, in 2014/2015 it issued 291 POs, in 2015/2016 it issued 350 POs and in 2016/2017 325 POs were issued. While different procurement methods were followed, Local Competitive Bidding and Direct Contracting seemed to be used more than other methods. In 2012/2013

Damietta WSC procured 186 works contracts. In 2013/2014 216 works contracts were procured, in 2014/2015 113 works contracts were procured, in 2015/2016 350 works contracts were procured, and in 2016/2017 325 contracts were procured. Local Competitive Bidding and Direct Contracting were the most commonly used methods.

112. Gharbiya WSC. In 2012/2013, Gharbiya WSC issued 26 purchase orders (POs) for Supplies and Goods, in 2013/2014 it issued 20 POs, in 2014/2015 it issued 19 POs, in 2015/216 it issued 32 POs, and in 2016/2017 22 POs were issued. While different procurement methods were followed, National Competitive Bidding and Direct Contracting seemed to be used more than other methods. In 2012/2013 the Gharbiya WSC procured 27 works contracts. In 2013/2014 12 works contracts were procured, in 2014/2015 14 works contracts were procured, in 2015/2016 43 works contracts were procured, and in 2016/2017 80 woks contracts were procured. National Competitive Bidding and Local Competitive Bidding were the most commonly used methods.

113. Menoufya WSC. In 2012/2013, Menoufya WSC issued 105 purchase orders (POs) for Supplies and Goods, in 2013/2014 it issued 220 POs, in 2014/2015 it issued 263 POs, in 2015/216 it issued 219 POs, and in 2016/2017 326 POs were issued. While different procurement methods were followed, Direct Contracting seemed to be used more than other methods. In 2012/2013 the Menoufya WSC procured 51 works contracts. In 2013/2014 51 works contracts were procured, in 2014/2015 49 works contracts were procured, in 2015/2016 93 works contracts were procured, and in 2016/2017 86 woks contracts were procured. National Competitive Bidding and Direct Contracting were the most commonly used methods.

114. **The financial management arrangements of WSCs, given their corporate nature, are governed by rules that are different from other typical government bodies.** WSCs are not required to hold their bank accounts with the Central Bank, but rather they open accounts with commercial banks. WSCs do not have financial controllers (representing the Ministry of Finance) to conduct ex-ante review and act as second signatory for checks. While no modern internal audit function is in place, the technical office affiliated to the WSC chairperson includes ex-post technical and financial reviews by specialized staff. The annual financial statements are audited by the Central Audit Agency, but they are not required to be made public.

#### **Capacity of the construction industry**

115. The PforR envisages a significant expansion in the current turnover of construction activities in the water and wastewater sector. The following table of the NOPWASD Approved Contractors and consultants provides an overview of the market in the water and wastewater sector:

116.

**Table A5.1 Categorization of Contractors and Consultants**

Contractors			Consultants	
Category	Program limit (LE million)	Number	Consultant category*	Number of consultants
1	Unlimited	63	A	9
2	120	42	B	17
3	100	63	C	24
4	50	102		
5	20	287		
6	9	217		
7	3	203		

(Note: \*The consultant categories are a combination of criteria such as staff numbers and track record.)

117. The absorption capacity of the construction industry is a cause for concern. There is an urgent need to have a clear picture of the local market. The classification of contractors has to be updated and the qualification requirements for the various categories discussed with the Contractors Union. The PMU is urged to look at the current capacity and consider it in packaging the contracts in order to promote contractor participation, including the development of local small and medium contractors. The participation of public companies (SOEs) must be avoided, because their involvement distorts competition and discourages contractors from bidding. However, earlier experiences in projects implemented through NOPWASD, IWSP, ISSIP and the parent Program have shown that there are considerable risks of delay, inadequate quality and high costs. These risks can be managed through support from ISCs. In particular, the following measures will be important:

- Post-qualification of contractors and rigorous bid evaluation to ensure that contractors have the necessary capacity (technical & financial) to carry out the works.
- Packaging of contracts to attract interest from capable contractors and obtain economies of scale.
- Apply prequalification of contractors as specified in the PPM for contracts with significant value.

**Controls and integrity**

118. **Strengthening the sector’s governance can be significantly advanced by an empowered independent regulator.** EWRA is mandated with that critical role. However, a major shortcoming in this regard is EWRA being chaired by the Minister of Housing, Utilities and Urban Communities. To ensure independence, regulators should not be linked to the respective executive body.

119. **The application process by citizens to request a new HH connection to the sanitation network should be streamlined and monitored.** Achieving efficiencies in processing time and documentation requirements can be monitored and added to the WSCs KPIs.

120. **An internal audit function should be maintained in the WSCs,** ideally reporting to the Board through the Audit Committee, to contribute to a systematic and disciplined approach to evaluate and improve the effectiveness of governance, risk management and control processes. This is in addition to external audits conducted annually by the Central Accounting Agency, as required by law for any entity with Government share equal to or above 25%, which is the case for all WSCs.

121. It is considered that the quality control processes are not sufficiently clear nor effective on upstream activities such as the preparation of designs, specifications and cost estimates. This is exacerbated by the fact that the WSCs subcontract these activities to outside consultants. Accountability at the WSCs, as well as availability of complete records of the procurement processes, is clearly defined in the PPM. The above includes established processes for procurement decisions made by the competent authority, which are generally not overruled. It is considered that bidding procedures adequately preserve the integrity of the process as there is a chain of custody of the bids and evaluations are confidential. It is considered that the integrity of the procurement process is well safeguarded. The review and update of PPM of the WSCs will assess whether the controls are causing any bottlenecks, and if they can be streamlined. The Authority for ratifying procurement actions is currently determined in accordance with the Unified Procurement Manual, as indicated in the table below in EGP.

**Table A5.2: Procurement Method Table for the Program**

Procurement method	Head of financial Sector	Chairman and Managing Director	Board
<b>National Competitive Bidding</b>	1.5 million	15 million	More than 15 million
<b>Limited Competitive Bidding</b>	1 million	8 million	More than 8 million
<b>Local Competitive Bidding</b>	0.5 million	3 million	More than 3 million
<b>Reverse Auction</b>	1.5 million	15 million	More than 15 million
<b>Limited Reverse Auction</b>	1 million	8 million	More than 8 million
<b>Local Reverse Auction</b>	0.5 million	2 million	More than 2 million
<b>Direct Agreement (Single Source)</b>	0.1 million for Supplies or Services 0.15 million for Works 50000 for sale	2 million for Supplies or Services 5 million for Works 0.4 million for Sale	5 million for Supplies or Services 12 million for Works 0.7 million for Sale

- **None of the WSCs have clear instructions for handling complaints nor are there clear contractual dispute resolution procedures.** WSCs have established that complaints are to be addressed to the chairman, who in turn forwards them to the respective departments in order to prepare the official response. As such, the system cannot be considered to be either independent or transparent. It is recommended to disseminate and promote the Complaints Handling Mechanism (CHM) which has been developed under the Program. In addition, the WSCs do not have ethics standards and the outcome of the procurement processes are not publicly disclosed.
- Therefore, **it is recommended to disseminate and promote** the Complaints Handling Mechanism (CHM) which has been developed under the Program.

### **Contract administration**

122. **It is considered that the WSCs have limited capacity for providing adequate contract administration.** Traditionally NOPWASD has been responsible for designs, specifications, cost estimates, procurement and contract management for the main trunk lines and WWTPs. Once concluded, these are handed over to the WSCs for O&M. The WSCs have only been involved in operations and maintenance and rehabilitation works contracts and network construction. However, even in the case of network construction, the designs and specifications, as well as construction supervision, have traditionally been subcontracted. As such, the WSCs do not have in house capacity.

123. **While there is no evidence of cost and time overruns in the performance of contracts, the level and quality of the consultants selected to prepare the designs and specifications, as well as construction supervision, is questionable.** There are established procedures to inspect for quality control of goods at the delivery stage. However, as a result of inadequate quality assurance processes, it is considered that the procedures to inspect the quality of works can be improved.

### **Performance of the Program financial management system against the critical elements of an open and orderly financial management system**

124. Similar to other line ministries, MHUUC's budget execution is subject to the ex-ante control system that is implemented by Ministry of Finance financial controllers, and includes transaction-based compliance controls over payments, recording of transactions, and production of accounts at the unit level. This is in addition to the ministry's own due diligence. MHUUC accounting units are subject to ex-post review of compliance by the Directorate for Financial Inspection in the Accounts and Financial Directorates Department in the Ministry of Finance. Accounting units across the central Government use the GFMS to record budget allocations and modifications, and to execute the budget through general ledger transactions. However, the budget execution process chain remains largely manual. The presentation of accounts is closely aligned to the international standard, and broken down by administrative category (administrative body, governorates and service authorities). Monthly budget execution reports detailing expenditures and revenues are produced by budget entities and submitted to the Ministry of Finance's Final Accounts sector within a maximum of ten days after each month-end. They include actual and budget amounts, but not commitments. Issuance of payments by MHUUC requires two authorized signatories. The first is the director of the financial and administrative affairs of the respective directorate, and the second is the Ministry of Finance's financial controller.

125. The HCWW and WSCs operate under the Public Business Sector Law no. 203 for the year 1991. Per this law, HCWW is owned by the government and its funds are kept either at the Central Bank of Egypt or at a commercial bank. For reporting purposes, the holding company is required to prepare consolidated financial statements showing assets, liabilities, shareholders, revenues and uses of funds of the holding company and its affiliates. Net profits are distributed per the general assembly's decision, and in line with this law and its executive bylaws. The government share of profit is transferred to the state general treasury.

126. The HCWW and its affiliate WSCs were created by Presidential decree no. 135 for the year 2004. Per this decree, WSCs replace the predecessor economic authorities and public-sector companies in the respective jurisdictions. These predecessor entities' assets and liabilities are transferred to the respective WSCs. The HCWW paid in capital amounts to the total capital of all of its affiliates (almost EGP10.1 billion

at establishment). WSCs paid-in capital was valued by a committee established for that purpose by the competent minister (MHUUC) and in compliance with law 203/1991.

127. **Program funds will first be transferred from the World Bank to the General Treasury against DLIs** agreed with the GoE as specified in the loan agreement. Per the World Bank's PforR guidelines, an advance representing 25 percent of the Bank-funded loan amount (equivalent to US\$71.25 million) can be withdrawn by the GoE to initiate Program activities. Subsequent withdrawals will be made against fulfillment of DLIs, duly verified by an IVA. The funds will be directed to budget line items designated for MHUUC allocations in line with the Program design (i.e., the three results areas identified under the Program). MHUUC will use the program funds as described below.

- i. **First.** Annual capital grants will be disbursed by MHUUC to WSCs based on the latter fulfilling the eligibility conditions. The WSCs will use the capital grants to finance their approved capital investment plans. This will enable WSCs to initiate contracting using the capital grants they receive from MHUUC. Starting from the second year of the Program, WSCs' eligibility for the following year's capital grant will depend on APA conducted for each of the three WSCs. A basic grant will be provided upon the WSC meeting the minimum conditions (MCs). Additional top up will be provided based on achieving the Performance threshold, thus rewarding better performance. To ensure clarity of roles and accountability, MHUUC should enter into binding agreements with WSCs that specify the responsibilities of each, the basis for periodic fiscal grants, and the performance assessment protocols.
- ii. **Second.** MHUUC will also release funds to HCWW and/or WSCs against implementation of capacity building activities evidenced by performance improvement plans.
- iii. **Third.** MHUUC will use part of the Program funds to implement the activities under results area 3 (Strengthened National Sector Framework). This involves the strategy, its implementation, the development of standard operating procedures for areas such as land acquisition, and the review of the national tariff structure for sustainable cost recovery.

### ***Procurement capacity***

128. **It has been concluded that the three WSCs have adequate staffing, in terms of numbers and experience, to implement the current activities but will require strengthening because implementation of the Program involves additional activities.** The activities that have been envisaged to be carried out under the Program go well beyond that which has historically been, and is currently being, carried out by the WSCs. This will pose a huge challenge because a series of activities currently carried out by NOPWASD are expected to be absorbed by the WSCs. The WSCs do not have experience in dealing with activities that involve the design, specifications, procurement and contract management for main trunk lines and WWTPs. The WSCs have a project development unit that oversees small scale rehabilitation and maintenance works, which on a limited scale involves procurement of design services, construction works and supervision services. The systems and skills needed for financial and contract management of large scale works have not been developed because the mandate of the WSCs has been limited to operations and small maintenance related works.

129. **The Menoufya WSC Contracts & Procurement General Administration (CPGA)** reports to the Financial and Administration Sector, which in turn reports directly to the chairman. CPGA has six staff who

are university graduates with accounting/business background and experience ranging between 5-15 years. The design and bidding documents are prepared by the Research, Studies and Designs General Administration, which is staffed by six engineers with 13-30 years of experience.

130. **The Damietta WSC Contracts & Procurement General Administration (CPGA)** reports to the Financial Sector that reports directly to the Chairman. The CPGA is divided into four departments:

- a. Contracts Administration and Procurement Administration
- b. Contract Management Unit
- c. Suppliers and Contractors Registration Administration
- d. Contracts Reviews General Administration

131. Among the four departments there are 22 Staff who are University or Institutes graduates with accounting background. Their experience ranges between 5 to 10 years.

132. **The Gharbiya WSC Contracts & Procurement General Administration (CPGA)** reports to the Financial and Administrative Sector which in turn reports directly to the Chairman. The CPGA is divided into two departments;

- a. Contracts Administration Procurement Administration
- b. Contract Management Unit

In total there are 12 Staff in the CPGA all University or Institutes graduates with accounting background. Their experience ranges between 5 to 10 years.

133. **The Contracts & Procurement General Administration (CPGA) at the WSCs** are responsible for - and coordinate with other WSC (Engineering, Technical, Financial etc.) departments - all procurement related activities from Advertisements to Contract Awards. They are represented in every committee formed and related to the procurement process. Furthermore, CPGAs play a major role in Contract Administration and processing of Contractors/Suppliers invoices up to issuance of the Taking Over & Acceptance Certificate.

134. Considering the new role of the WSCs to carry out infrastructure investments as identified in their annual capital investment plans, the issue of weak capacity in procurement will be addressed in several ways. As under the Program, PMCF will support the three new entrants under the AF either by extending the scope of services of the current PMCF or by identifying and hiring another firm. If the latter option is decided, the selection process must start immediately, as it may take months to bring the firm on board. The PMCF will support the PMU and will have an overall quality assurance and supervisory role, particularly in relation to final designs and specifications. Considering the issues associated with the WSCs' procurement procedures as identified in the FSA, PMCF must be a highly qualified firm to ensure the success of the program. It should be noted that all consulting firms will be selected using Borrower's own procedures in accordance with the PPM and using the SBDs that are developed under phase I.

#### ***Financial Management capacity***

135. **FM Staffing Structure.** The financial affairs section in WSCs is headed by a section head reporting to the company chairman. The financial affairs section is comprised of the general directorates of accounting, budget, costing and audit.

136. **Budget formulation.** The WSCs develop their budget based upon their recurrent O&M costs, information collected from the technical departments, and forecasts of sales (water, treatment plant



outputs, installation fees, etc.). The WSCs' main source of funding is consumers' billings, in addition to other revenues generated from extra services or sales.

137. **Internal Control.** Payments for design and construction activities under the networks and treatment plants' construction contracts depend upon different layers of control (ex-ante or ex-post) to review project progress and the validity of payments. These control layers are represented by site engineers, supervision consultants, HCWW review committee in some cases, and finally the company's external auditors. Site engineers and supervision consultants provide ex-ante controls through the review of physical progress and approval of contractors' invoices/bills. In addition, networks' post reviews are conducted at the HCWW level through review committees, including technical and financial representatives.

138. **Financial Reporting and Auditing.** HCWW and WSCs are required to prepare annual financial statements in accordance with the Company Law no. 159 for the year 1981. These financial statements should be presented in compliance with Egyptian Accounting Standards issued by the Minister of Investment decree no. 243 for the year 2006. Such financial statements are subject to annual audit by the Supreme Audit Institution, known as the Central Audit Organization of Egypt. Each WSC will have its annual financial statement audited and submitted to the Bank, as specified in the Program Agreement.

#### ***Financial Management Institutional Arrangements***

139. **The WSCs are directed by a board of directors comprising five members at least** and nine members at most, including the Chairman of the Board. Their selection, determination of board members for full-time management, their remuneration including bonuses and allowance for attending sessions, and flat salaries for full-time members shall be subject to provisions of Law on Public Business Sector.

140. **The Board of Directors have the right to appoint from among its members or the directors of the company those who shall have the right to sign for the Company** severally or jointly in specific affairs or topics. The General Assembly of the Company meetings shall be attended by the Company's Board Chairman and members and controllers of the Central Agency for Accounts but without counted votes.

141. **Ordinary General Assembly shall convene twice a year at least**, one of which shall be three months before the startup of the fiscal year to look into the estimated budget of the Company, and the other during three months after the end of the fiscal year to consider issues including auditor's report, ratification of financial statements, ratification of board of directors' annual report, and reports by the Central Auditing Organization regarding auditing of company's accounts and assessment of its performance.

142. The Program financial statements will be prepared by the PMU established at MHUUC. Since all program funds are transmitted from the state treasury through MHUUC account at the Central Bank, MHUUC PMU is in a better position to capture and report on overall program disbursements. This includes base and performance grants to WSCs, transfers to the HCWW and WSCs for preparing and implementing performance improvement plans, and expenditures incurred by MHUUC itself in the course of strengthening the national rural sanitation sector framework.

143. **Coordination between the various agencies involved will be critical to the success of the program.** The MHUUC provides the overall water and wastewater sector leadership. The MHUUC sets the sector policy and coordinates the overall investment program for the sector. It oversees a number of agencies and public service companies, including: EWRA; HCWW; NOPWASD and, the Cairo and Alexandria Potable Water Organization (CAPWO). The MHUUC, through the PMU, is responsible for preparing, coordinating and providing oversight of the NRSP. The PMU is established for this purpose and staffed accordingly. The role of HCWW is to provide support to the WSCs in performing their core tasks of providing sanitation services and operating and maintaining public infrastructure. Local governments are not directly engaged in the program but are involved through its membership of the board of the WSCs.

144. NOPWASD, a technical agency under the jurisdiction of the MHUUC, has been historically responsible for investment planning, design and supervision of construction of water and sanitation infrastructure. As at present, works are funded through the state budget. After completion and at the end of the contractual maintenance period, the facilities are handed over to HCWW and WSCs for future operation, maintenance and management. However, under the Program, this function will be taken up by the WSCs.

145. **EWRA regulates, follows up and monitors all public and private activities related to water and wastewater.** EWRA was established by Presidential Decree in 2004 and is chaired by MHUUC minister. The EWRA aims to “enable and encourage projects to achieve the highest level of performance to ensure the sustainability of the service at the required level of quality and efficiency and provide the services to the consumers in a satisfactory mode and at the most reasonable prices” (136/2004.) Tariff adjustment decisions are, however, under Cabinet authority.

146. **The financial performance of many WSCs is already suffering from operating losses, even with subsidies received through HCWW.** The Program aims to address this in two ways. The model of annual fiscal grants and performance assessment against specific indicators will pressure WSCs to achieve more efficient delivery of services and more prudent financial performance. In addition, the predictability of funding and its consistent availability offered by the Program model will help WSCs achieve their target financial indicators.

147. **The envisaged significant increase in WSCs execution of investments involves additional risks on financial implementation and oversight.** The strengthening of the internal audit departments at WSCs is crucial. The Internal Audit departments should ideally report to the Board of Directors through an Audit Committee and contribute a systematic and disciplined approach to evaluate and improve the effectiveness of governance, risk management and control processes of the companies. The transparency of financial statements and audits should also contribute to public oversight and hold the implementing entities accountable. The Borrower will ensure that the WSCs annual audits are published.

### **Fraud and Corruption Risks**

148. **There are several entities responsible for addressing corruption issues in Egypt.** While some of these entities are required to publish annual reports per the Egypt 2014 constitution, the entities’ respective laws need to be amended to align with the new constitutional requirements to make the annual reports publicly available. The pending amendment is delaying the public availability of these reports. The following agencies are the most relevant bodies that deal with anti-corruption: (i) The Central Auditing Organization (CAO); (ii) The Office of the General Prosecutor; (iii) The Administrative Control Authority (ACA); (iv) The Administrative Prosecution Authority (APA); (v) The Illegal Profiting Apparatus

(IPA); (vi) The Money Laundering Combating Unit (MLCU); and (vii) The Complaints Handling Unit in the Ministry of Finance.

149. After discussing **the Bank's right to investigate allegations of fraud and corruption in the Program**, the Borrower has agreed that the Bank's procedures will be followed in this respect. The application of the Bank INT guidelines will involve both the Bank's right to investigate as well as the debarment of contractors/suppliers.

150. **Debarment of Contractors.** In accordance with the Bank's Anti-Corruption Guidelines for PforR operations "Guidelines on Preventing and Combating Fraud and Corruption in Program-for-Results Financing" dated February 2, 2012 and revised July 10, 2015, the Program must take steps to ensure that debarred individuals or entities are not awarded contracts. The POM will establish that, prior to contract award, the WSCs must check the Bank's list of debarred contractors to ensure that no such contractor is awarded a contract under the Program. The IVA will verify the above through a review of a representative sample of contracts.

#### **Fiduciary Elements of the Implementation Support Plan**

151. Implementation progress and changes in fiduciary risks to the Program will be monitored regularly. During the planned supervision missions, verification of compliance with the activities required to address the weaknesses and constraints identified in the FSA will be monitored. The PMU will be required to prepare a progress report, including procurement and financial indicators, before every supervision mission, so that the team could identify the main issues with the client and work on measures for improvement during the mission, as part of the implementation support. Fiduciary staff will continue to be fully integrated and work with the task teams to examine the achievement of Program results, the DLIs that are of a fiduciary nature, and the implementation of the PAP.

152. Hands on support, on the job training, and capacity building will be provided to the WSCs through the implementation support consultant to be selected under the Program. In addition, on an ongoing basis, the WSCs will be assisted to resolve any implementation issues that may come up.

153. The performance indicators agreed with the Borrower will be applied to measure the performance of the fiduciary systems. An IVA will review the achievement of the DLIs prior to withdrawing funds from the loan, except for the advance, which is not released against prior review of DLIs. Data will be collected from the e-procurement portal and analyzed to produce the desired indicators.

#### **Fiduciary Elements of the PAP**

154. **Internal audit.** Effective internal audit function should be ensured in the WSCs to contribute a systematic and disciplined approach to evaluate and improve the effectiveness of governance, risk management and control processes of the companies. As opposed to the transaction-level reviews performed by financial controllers, the internal audit function would focus on:

- Measuring the inherent and residual risks associated with WSCs' operations and planning its audit work program accordingly.
- Using analytical procedures, information system audit and assurance standards, and data mining tools – for which due access to the MIS databases for audit purposes should be secured.

- Undertaking spot checks and field visits regularly to validate continued relevance of internal controls, including the quality of the complaints mechanism.
- Following up on the timely implementation of audit recommendations.

155. **Financial reporting.** The Program financial statements should be subject to periodic and timely reporting. The financial reports should be publicly available.

156. **External audit.** Program financial statements will be audited by independent external auditors, with TORs that will also include verification of the DLIs. The results from these audits should be made public as per the provisions of the financing agreement.

## Other elements

### 1. Inconsistent application of rules and procedures

Actions to address shortcomings:

1. All WSCs to adopt and implement the PPM developed under the Program.
2. All WSCs to adopt the SBDs developed under the Program.
3. Improve procurement practices, i.e., not allow bidders to offer discounts after bidding due date, no price negotiations unless allowed for and regulated in the bidding documents (BDs), require that bidders' qualification (financial and technical) be verified prior to contract award, reduce rebidding, etc.
4. Provide training to procurement staff in the WSCs.

#### Indicators

1. PPM developed under the Program is adopted by all WSCs.
2. SBDs developed under the Program are adopted by all WSCs.
3. Number of procurement staff trained.

### 2. Lack of performance information, linked to an inability to collect and interpret data

Actions to address shortcomings:

1. Ensure that ALL bidding opportunities, bidding documents, bid evaluation results, including on direct contracting, original and final contract amounts are advertised in the GoE e-portal: [www.etenders.gov.eg](http://www.etenders.gov.eg)
2. Agree on performance indicators
3. Collect and analyze data
4. Provide training to procurement staff in the WSCs

#### Performance Indicators

1. Number of bidding opportunities being advertised in the e-procurement portal.
2. Data analysis and ongoing application of Performance indicators
3. Procurement staff trained
4. Time to conclude procurement process by ranges in value (low value contracts ≤ US\$1 million, contracts between US\$1 million and US\$10 million, contracts above US\$10 million).
5. Quantity of processes being retendered.
6. Number of contracts awarded on sole source basis.
7. Spread between estimated cost, original contract amount and final contract amount.
8. Number of contracts subject to cost and/or time overruns.

### **3. Lack of accountability mechanisms, such as a functioning complaints and grievance mechanism**

Actions to address shortcomings:

1. Hire the Independent Panel Members for the CHM.
2. Disseminate and promote the usage of the complaints mechanism with the private sector and civil society at large.

#### **Indicators**

1. Hire the Independent Panel Members for the CHM, which has been developed under the Program, and disseminate and promote it.
2. Complaints mechanism disseminated to the private sector and civil society at large.

### **4. Quality of works including weaknesses in contract management**

Actions to address shortcomings:

1. Ensure Quality and completeness of Designs and Specifications, including reliable and accurate of cost estimates.
2. Ensure that selection of consultants, including the PMCF and ISC, that prepare designs and specifications as well as those selected to carry out construction supervision, follows a quality cost-based selection to ensure minimum requirements of general and specific experience, as well as expertise in the respective field.
3. Verify and confirm technical and financial qualifications of contractors.
4. Develop and implement a training program for technical staff in the WSCs responsible for quality control and supervision of works contracts.

#### **Indicators**

1. Procedures for selection of consultants and procurement of contractors adopted and enforced.
2. Implementation Support Consultant selected and mobilized to WSCs.

## Annex 6: Environment and Social Systems Assessment – Addendum

156. **Environmental.** The environmental system described in the parent ESSA is still applicable both in terms of laws, regulations, standards, and in terms of procedures and implementation of those laws and standards. An exception to this is a change that occurred on the classification of sanitation projects, as the old classification system that used to have all WWTPs on the higher impact category (Category C in the Egyptian system) is now modified by introducing a fourth category (now the categories are A, B, Scoped B and C) and by having the classification of WWTPs between the three categories (A, B and C). This change has been introduced during the implementation of the parent Program and most of the Program sanitation facilities will be either Category B or Scoped B. The change in classification has not affected the rigorousness of the ESIA's prepared by the Program following the capacity building provided to the Program entities. This has resulted in significant improvement in the quality of ESIA's as indicated below.

157. The planned interventions of the AF have been screened for their eligibility to be financed under the PforR instrument. Except for the cluster served by Al May (Shebin El Kom/Menofiya) WWTP, all other activities are believed to be eligible for PforR finance and none of them are likely to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people. The above cluster will be excluded through the verification protocol of DLI1.

158. OP 7.50 is applicable to the Program as assessed in the ESSA given the nature and location of the interventions. However, the Program and the AF fall within the exception to the riparian notification requirement under paragraph 7 (a) since the interventions comprise an ongoing scheme but are of a limited scale and will not adversely change the quality or quantity of water flows to other riparian countries. Overall, the Program will positively impact canals and drains in the program areas. Egypt is located at the extreme downstream of the Nile River, and the Program interventions will improve the quality of the final reaches of the Nile Delta.

159. The overall environmental impacts of the AF will be positive, as it will introduce important solutions to inadequate environmental and health conditions resulting from absence of proper sanitation systems. The environmental impacts of the interventions under the AF are the same as those identified for the parent Program, and included in the ESSA: the risks associated with handling of sludge, risks of handling of solid wastes separated in PSs and WWTPs, risks of discharging noncompliant effluent, risks to the health and safety of workers and neighboring communities, risks of sewerage blockages, and risks of improper handling of chance finds of physical cultural resources. The risks/impacts of the AF will affect a different geographic area but with similar context and baseline conditions as the areas of the parent Program (conditions in the Nile Delta are very similar).

160. The three new WSCs were visited during the preparation of the ESSA Addendum, and it was concluded that the procedures and capacities of the three new WSCs are close to those of the old WSCs during the preparation of the ESSA of the parent Program. However, experience has been gained in some of the new WSCs from implementing projects of international funding agencies (ISSIP and ISSIP2 World Bank projects in Gharbiya and Menoufiya, and IWSP EU project in Damietta). The experience and momentum gained in implementing environmental measures of the parent Program are likely to enhance capacity building – for quickly getting them into the required level of improved procedures – of the new WSCs.

161. Implementation of environmental measures recommended in the ESSA of the parent Program is progressing well. Although such measures were not explicitly captured in the PAP of the parent Program, the PMU and the three PIUs were highly committed to implement all the ESSA recommendations and included them in the POM. The client has recruited experienced environmental specialists at the PMU and the PIUs and started timely preparation of ESIA for sanitation investments, as per Egyptian legislation. A spot check has been conducted by the WB team to check the quality and an opportunity for improvement was noted (meaningful consultation, adequate analysis of alternatives, capture of different risks and impacts, and providing adequate mitigation measures). The PMU and PIUs have also started to initiate and frequently update the Environmental Registers of WWTPs to include waste handling procedures (for waste separated on screens and grit removal chambers).

162. On the health and safety, the PMU and the PIUs took advantage of the improvements after a fatal accident that occurred two years ago in another Bank Project (ISSIP2 Project) and started implementing those improvements in ongoing contracts. However, another fatal accident occurred later on a construction site of the parent Program on June 5, 2018, which revealed some weaknesses in the OHS management in the sector.

163. A Root Cause Analysis (RCA) was carried out for this accident and recommended a ten-item action plan to strengthen the occupational health and safety (OHS) system was recommended, which included, *inter alia*: (i) applying enhanced OHS standards, such as the World Bank Environmental Health and Safety Guidelines, and the OSHA, (ii) strengthening compliance with permits and works supervision standards, (iii) enhancing training on OHS. The GoE confirmed its commitment to implement the action plan. The OHS strengthening measures are included in the ESSA Addendum and are integrated in the PAP, the verification protocol of the DLIs, and the detailed technical design of the TA component.

164. The team visited the three existing WSCs during the preparation of this Addendum and acknowledged the above improvements. During those visits the team also conducted site visits in Sharkiya and Dakahlia (no construction works had started in Beheira at the time of preparing this Addenda), before the occurrence of the above mentioned fatal accident, and observed reasonable OHS measures at construction sites. There are still some environmental aspects to be improved, such as further improvement of ESIA quality (improve description of baseline conditions, include OHS risk assessments, timely preparation of health impact assessment for WWTPs that do not fulfill the 500 meter buffer zone required by MoH due to the high population density), timely integration of ESMPs in tender documents and include some fines for non-compliances, improving better access to residents during construction, and starting the sludge sampling program to inform the subsequent handling procedures. The measures for achieving these improvements will be included in the POM and the PAP actions, and the Bank team will continue to provide implementation support to ensure the timely implementation of these measures.

165. **Social.** The social risk management system described in the parent ESSA is largely still applicable both in terms of laws, regulations, standards, and in terms of procedures and the implementation of those laws and standards. The addenda of the ESSA presented a number of changes in the laws and regulations that have been introduced at the macro level. This most importantly includes the issuance of Law No. 144, Year 2017 on the “Rules and Procedures of Disposition of State Property” and introduction of changes in the Law No. 10, Year 1990 on “Land Expropriation for Public Interest”. The former has been introduced in the country as a response to massive land encroachment on state owned land. Law No. 144, and its regulations, set rules and procedures for the actions that should be taken to restore state owned land and/or to help the land seizures to legalize their position under certain criteria and arrangements. The changes introduced to Law No. 10, Year 1990 are meant to improve certain provisions to ensure that the

application of the Law brings fair compensation to the affected persons from land expropriation, speeds up the process of land expropriation, and makes it more sensitive to subsequent social impacts. The Law amendments are consistent with Article 35 of the Constitution which stipulates the principles for protecting private ownership and for offering fair and advance compensation for expropriation for public interest projects. Law 10 amendments have passed rounds of approvals in the Ministry of Justice, the Cabinet and the Parliament. The Parliament quorum with the final approval on the Law amendments is yet to come. While the amendments of Law No. 10 are likely to bring fairer and more transparent system for compensation in the cases where the eminent domain applies, Law 144, Year 2017 and all the surrounding applications and practices may bring to the Program some challenges and risks. This could be in the cases of using land with past encroachers who were removed since this might bring legacy risk to the Program. It should be noted that land acquisition SOP have been developed under the Parent Program. The update of the SOP and the operationalization in all governorates of the Program (including the ones for AF) should help in mitigating such risks.

166. Under the parent Program a range of citizen engagement activities were integrated into various aspects of the Program. The AF aims to build on the strong citizen engagement activities and reforms of the parent Program, supported by cross-fertilization among the targeted WSCs to allow for experience sharing and to ensure that the designed measures of citizen engagement (e.g. CMS and project-related GRM, beneficiary feedback, etc.) are strengthened and institutionalized in all participating WSCs. As under the parent Program, targeted WSCs will rely on (i) the Citizen Engagement Guidelines developed (and updated as appropriate) to strengthen their community outreach and engagement and (ii) the recommended improvements to the existing hotlines for complaint handling and grievance redress. The concept of citizens audit and monitoring will be systematically introduced in the AF using mechanisms like the local committees – operationalized through the PAP. Overall, the three new WSCs' capacities are similar to what was seen in the three WSCs at the beginning of the parent Program.

167. Local Community Committees (LCCs) have been established in the target Program area for effective communication and to rebuild the trust between WSCs and citizens. Formation of these committees was needed in order to facilitate two-way communication between residents in related communities and the WSCs. The WSCs made efforts to ensure that these committees have representation of vulnerable groups, including women and youth. Moving forward, efforts will be made to increase the participation of women within the LCCs and through cluster-level women's forums. The committee meetings offer a space for deliberation and open discussion. LCCs can then notify WSCs about potential issues, questions or concerns, and help inform communities about project-related updates. In addition, the LCCs are also an important medium to facilitate the land acquisition process, raising awareness and helping to get the approvals needed. LCCs also serve as an uptake channel for complaints, by relaying information and complaints – both related to the Program and more broadly – from citizens to the WSCs. The LCCs also have a role to play in facilitating work in the field with the implementing contractors.

168. The implementation of the AF will help in elevating the negative health and social impacts of the current unhygienic sewage systems that the targeted rural communities in the three Governorates are suffering from. The AF will help in providing sanitation service which is very highly demanded by the poor rural communities of the targeted governorates. There are number of benefits and positive returns that the Program is expected to help local communities to attain. Most important benefits include economic savings at the HH level, health and public hygiene awareness benefits. Implementation of the AF will bring special benefits for women and children who are the most negatively affected categories from the current situation.



169. The negative social impacts and risks of the interventions under the AF are very similar in nature to those identified for the parent Program and included in the original ESSA. This most importantly includes the fact that the AF will entail land acquisition for the construction of pumping stations and WWTPs. If not handled carefully, land acquisition might result in serious impacts on individual land owners and land users. At this stage, since the technical design of the program is premature, it is difficult to know the exact amount of land that will be needed and consequently, it is also difficult to estimate the number of land owners and land users who would be affected from the land transaction process. The main land related risks could be attributed to the limited capacities of the new WSCs under the AF to manage land issues, the potential delay in implementation as a result of land acquisition, challenges related to the lack of consistency and transparency in managing land related issues, livelihood risks related to lands as well as the poor management of the temporary impacts related to land. In the meantime, the same non-land related risks that have been identified for the parent Program apply to the AF. These include risks of: damage associated with construction activities; inconvenience to the local communities and temporary disruption of local activities within villages; health and safety risks for workers and local residents within the Program site; weak sense of demand for, acceptance of, and readiness for projects in certain communities; potential social tensions as a result of exclusion of certain villages; lack of affordability to the service by poor HHs and potential escalation for unresolved community concerns/complaints

170. Under the parent Program, tangible achievements include dealing with land acquisition through timely fulfillment of DLI 6, which stipulated the approval for land acquisition under NRSP by MHUUC. The SOP aims to harmonize Egyptian requirements with international best practice and to include a clear sequence for reviews and approvals, as well as to improve the overall basis for implementation of investments in the sector. Prior to the preparation of the land SOP, the MHUUC transitionally and proactively agreed with the Bank on following interim arrangements for acquiring land to make sure that the process followed the principles of OP9.00 and also to avoid any delay in land acquisition until the SOP was finalized.

171. The MHUUC and the three WSCs under the parent Program have gained experience in handling land related issues. As of December 2017, and according to the information received from the MHUUC, about 84 plots of land of the 87 required land plots for pumping stations (PSs) and WWTPs for the mother villages of the parent Program were secured, and 34 plots of land of the 35 required land plots for PSs of the satellite villages were secured. These plots were secured by either by applying the SOP or under the interim arrangements. In the meantime, and at the level of the social assessment under the parent Program, the WSCs with support from the Bank and MHUUC made great progress in establishing a system for social assessment. They have been preparing ESIA's and conducting consultation as part of project preparation under the parent Program.

172. The Bank conducted spot checks related to application of the land SOP and the interim arrangement and related to the quality of the social assessment process. The main takeaways from these two important exercises are: (i) land related issues could be better managed through reviewing the SOP to introduce better measures in areas that include, but are not limited to, land valuation, consistency and sharing of information and systemizing the role of the local community committees and maximizing the role of the WSCs in overseeing the process; (ii) on the social assessment front, the quality of the assessment could be strengthened further to include more concise baselines, better documentation of the consultation process, better integration of women in the consultation process, and ensuring that the stakeholders feedback obtained in the consultation are informing, to the extent possible, the design of the projects. It should be noted that the institutional assessment for the three new WSCs under the AF clearly showed that the capacity for managing land acquisition and carrying out social assessment by the

related departments (e.g., the community engagement and awareness raising departments or by the RSUs in the projects where ISSIP has been implemented) is very low because their engagement in those aspects (which is largely managed by NOPWASD and the HCWW) is very limited.

173. **Citizen Engagement and Gender.** The parent Program introduced many activities to strengthen citizen participation in the design and implementation of the projects, but it was found that in many cases women did not participate as often or as deeply as their male counterparts. In the three WSCs, only 21 percent (278 out of 1,299) of the community committee members are female and during consultation events, only 17.2 percent of attendees were female. During focus group discussions with women in the communities, it was found that the process for forming the committees and the timing of meetings were both barriers to greater female participation. To address these gaps, further measures will be mainstreamed in the AF design and operationalized through the PAP to deepen the gender dimensions of the Program by: (i) creating local women's forums at the cluster level; (ii) setting clear roles for the women's forums and tracking their role in the design and the decision-making processes; (iii) establishing databases for gender-disaggregated data to monitor gender related indicators (e.g., women beneficiaries, GRM, etc.); and (iv) better scheduling meetings and consultation events to encourage greater participation by women.

174. Under the Program, women are not only beneficiaries of the investments, but there are also many women working within the WSCs. Under the AF, career constraints that these women face could be addressed. Based on preliminary focus groups with women in the WSCs, some of the current bottlenecks they face in advancing their careers are: lack of clarity on paths to promotion at the highest levels and hiring criteria may unintentionally disadvantage or discourage women from applying. Given the limited data available at this stage, it is proposed to undertake additional analytical work before defining any specific possible intervention.

175. The progress that MHUUC and the targeted WSCs under the parent Program have achieved in managing social risk and in advancing citizen engagement (CE) measures have been very positive and set a foundation for cross fertilization between the three WSCs of the parent Program and the three new WSCs under the AF. The addenda of the ESSA, including the analysis of the capacity of the new WSCs, the areas for improvement of the performance of the WSCs of the parent Program, as well as the developments that took place at the macro level in relation to land issues, helped in putting together different measures and performance blocks in the AF design to help in ensuring that the environmental and social risks are diligently managed, and to help in deepening citizens engagement and gender mainstreaming in all six WSCs under the Program.

## **Recommendations**

### ***Measures fulfilled***

176. A retroactive review for any land plots that might have been secured for the AF investments in the three new WSCs has been initiated and phased against the principles of the SOP, among other factors (e.g., technical requirements). Any land plot that may result in generating any serious risk to the Program implementation and reputational risk should be excluded and/or alternatives should be found. Audit results should be shared and discussed with the Bank along with a time-bound action plan with corrective actions where applicable. The list of the proposed projects should be revised based on the results of the audit.

177. **Measures to be included as DLI.** DLI 6 was achieved in the parent Program, so a new DLR is being added for the signing of an inter-ministerial MOU for the implementation of an updated land acquisition SOP.

### **Measures to be included in DLI verification**

178. The Verification Protocol of DLI1 includes a requirement that an ESIA has been prepared for the cluster that includes the subject house connections, ESIA approvals were obtained prior to construction, and contractors commitments according to ESMPs are included in construction documents. Also, the verification protocol should ensure exclusion of ineligible investments (from the environmental and social perspective) as recommended in the ESSA Addenda.

179. The verification protocol of DLI5 includes the preparation of a Strategic Environmental and Social Assessment (SESA) as part of The National Water and Sanitation Strategy, so that SESA recommendations will inform sector action plans.

### **Measures to be included in the POM**

180. Design and implement a comprehensive capacity development and awareness raising program, including cross fertilization and a peer to peer learning process, to allow the three new WSCs to benefit from the experience of the MHUUC and the three WSCs of the parent Program in the field of environmental and social management (including land related issues as well as CE and gender aspects). The capacity building program should be offered to the PMU, WSCs, LCCs and other relevant stakeholders to ensure that the recommendations are properly implemented in a timely manner.

181. The performance indicators of WSCs should include improving environmental management of sanitation facilities, including the establishment and updating of Environmental Registers reflecting good waste management practices (indicators to include adequate tracking of waste management practices and response to environmental complains, e.g., odor control measures).

182. The performance indicators of WSCs should include improving OHS conditions within the sanitation assets, including WWTPs, PSs and maintenance of networks. OHS departments of WSCs should carry out OHS audits (by WSC OHS staff or third-party consultants) to ensure consistent improvement of OHS conditions across the WSCs (indicators to include number of OHS audits undertaken, number of addressed comments in the following audit, and recording of incidents and near misses).

183. Strengthening EWRA capacity to include environmental and social capacity building to add environmental and citizen engagement indicators to their M&E activities (environmental indicators to be added to the WSS information system, state of the sector reports, and APAs as indicated above).

184. Citizen Engagement and Social Assessment Systems to be institutionalized in the targeted WSCs. This would be achieved through the preparation of Community Engagement Guidelines to be updated to strengthen quality and ensure that critical issues related to the SIA (e.g., community health and safety, labor protection, land, labor influx and GRM requirements) are well covered and that systems are in place to integrate them in the bidding documents, along with other aspects related to CE and gender. This should be completed in three months after the effectiveness of the AF loan.

185. **Measures to be included in the PAP.** See Annex 7 for an updated PAP, including inputs related to environmental and social aspects.

186. **Additional recommendations. Women in utilities.** Based on the assessment under the ESSA addenda, the following are some additional areas for improvement: (i) Revisit the HR policy, promotion procedures and relevant guidelines to include specific criteria for selecting top management positions, in WSCs and ensure that women and men have equal opportunities to reach these positions; (ii) Improve the current HR databases to generate reports disaggregated by gender, e.g., on training and career trajectories; (iii) Review and revise the advertisements for employment opportunities, and address any discriminatory sections And consider the inclusion of explicit non-discriminatory policy/language; (iv) Establish training on gender mainstreaming and advocacy as an ongoing process in the WSCs, including an orientation session on gender for some staff; and (v) Explore possible programs targeting young female staff, e.g., through mentorship opportunities or internship programs, to provide valuable work experience to recent engineering graduates.

187. **ESSA addendum disclosure and consultations.** The dates of the ESSA Addendum public consultations were April 11, 12 and 19, 2018 in Damietta, Gharbia and Menofia, respectively. For the disclosure, the ESSA Addenda was disclosed on May 8, and redisclosed, after reflecting the OHS and OP 7.50 updated, on August 9, 2018.

**Annex 7: Modified PAP**

<b>Original/ Revised/ New/ Dropped?</b>	<b>#</b>	<b>Action Description</b>	<b>Due Date</b>	<b>Responsible Party</b>	<b>Completion Measurement</b>
Revised	1	Program Agreements between MHUUC and EWRA and a Program Agreement between HCWW, new participating WSCs should be in place establishing mutual obligations.	By loan signing	PMU, HCWW, EWRA and new participating WSCs	Agreements between MHUUC and EWRA and Agreements between HCWW and new WSCs established and operationalized.
Revised	2	Updated Program Operations Manual (POM) provided to the Bank for No Objection.	30 days after effectiveness	PMU, HCWW, EWRA and participating WSCs	Bank No Objection Provided
Revised	3	The PPM as well as the SBDs and the Complaints Handling Mechanism (CHM) are adopted by the three new WSCs and procurement staff trained	3 months after effectiveness	MHUUC	PPM and SBDs adopted by the Board of Directors of all 3 WSCs Procurement staff trained
Original	4	All bidding opportunities, bidding documents, bid evaluation results, including on direct contracting, estimates, original and final contract amounts are advertised in the GoE e-portal: <a href="http://www.etenders.gov.eg">www.etenders.gov.eg</a>	Continuous/ Ongoing	WSCs	Verification that all relevant information is being published in the GoE procurement portal
New	5	The Borrower shall through MHUUC ensure that procurement under the Program is done using the PPM and SBD developed under the Program.	Continuous/ Ongoing	PMU and WSCs	Verification that all procurement under the Program is done using the PPM and SBD
Original	6	Program financial statements will be audited by the IVA with terms of reference that will also include verification of the DLIs. The results from these audits should be made public as per the provisions of the financing agreement.	Annually	IVA	Verification that Program financial statement are audited by the IVA and made public, and DLI verification reports are issued annually.
Revised	7	The institutional set-up of the Program should be strengthened at the WSC level by being staffed	Before effectiveness	MHUUC	Each new WSC staffed with Environmental and Social specialists.

		with a senior environmental specialist and a senior social specialist, a trained OHS competent persons as required by the RCA prepared in June 2018.			
Dropped	8	The performance evaluation system should be strengthened through the establishment of a performance-based monitoring system to evaluate performance of technical, fiduciary, environmental, and social teams assigned to the program.	Within 6 months after Program effectiveness	PMU, WSCs and ISC	Performance evaluation systems developed and implemented.
New	9	Maintaining an information system by each WSC including at a minimum an accounting module and contract management module.	Within 6 months after Program effectiveness	WSCs and HCWW	System in place and operational
New	10	Appointment of the Independent Panel members for the Complaints Handling Mechanism (CHM) which was developed under the parent program, dissemination and promotion of the Complaints Handling Mechanism (CHM) to the Construction Industry.	Within 6 months after Program effectiveness	PMU	Complaints Handling Mechanism (CHM) fully functional
New	11	Realization of technical pre-feasibility studies for identified sub-projects, on the basis of cluster optimization and options development approach.	Before effectiveness	PMU/WSCs	Pre-feasibility studies finalized
New	12	OHS measures during construction should be strengthened through adopting an OHS plan prepared for further inclusion in each construction contract and contracts with the supervising engineers, which includes adequate risk assessment, mitigation, communication, training, emergency response and incident reporting. OHS measures will include the recommendations of the RCA for the accident occurred on June 5, 2018. These OHS plans should be supervised by	By effectiveness	PMU/WSCs	OHS plans prepared for further inclusion in construction contracts and the contracts with the supervising engineers

		qualified H&S experts at each construction site.			
New	13	Develop a plan to operationalize a system for enhancing accountability and information sharing in the Program.	6 months from effectiveness	PMU, WSCs	Strengthening the role of the Local Community Committees; Introducing, piloting and scaling up community monitoring and beneficiary feedback; Developing and operationalizing WSC-level information sharing and disclosure protocol
New	14	Improve social inclusion in the Program (gender mainstreaming).	6 months from effectiveness	PMU, WSCS	Increase representation of women in community committees (new and existing) formed for the Program; Create and operationalize female forums at the Governorate level that would be helping in reaching out to the cluster level; Women representation to be attained in the staffing of the PIUs, particularly the staff working on social risk management and Citizen Engagement; Strengthen the role of women in consultations and GRM.
New	15	PMCF and ISC have to support the three new entrants under AF	6 months after effectiveness	WSCs	PMCF and ISC are hired
New	16	Set monitoring system for the ESMPs and operationalize in all the WSCs of the Program. The monitoring system should include conducting certain audits (by PMU/PIUs or by a third party consultant) to make sure that ESMP measures are implemented on ground	Within 6 months after Program effectiveness	PMU, WSCS and ISC	Performance evaluation systems developed and implemented.

## Annex 8: Description of the IPF Component

184. **Support to the PMU** to provide for effective Program implementation of the PforR to support capacity building for key institutions within the sector and strengthening the enabling environment for efficient and accountable rural sanitation service deliver, including, *inter alia*:

185. Strengthening EWRA's regulatory functions to enable it to deliver its business mandate, including: (i) developing a WSS information management system and related training; (ii) improving EWRA's institutional performance through conducting institutional development surveys, developing TORs for EWRA staff employment, and staff training; (iv) preparing standard operating procedures and a business plan for EWRA; and (v) engaging consultants to support EWRA in improving its institutional effectiveness.

186. Strengthening the Borrower's capacity in verifying the Program's DLIs/DLRs through, *inter alia*, hiring of an IVA.

187. Strengthen the capacity of the Program Implementing Entities in achieving the DLIs / DLRs through learning and training support.

188. Strengthening the capacity of the PMU in performing management, coordination, monitoring and evaluation functions for the Program, through financing required goods, consultant services and Operating Costs.

189. Strengthening the capacity of the MHUUC/PMU in performing sector planning and policy making functions for the water and sanitation sector through carrying out related advisory, analytical studies and capacity building activities.

190. The IPF component will finance goods, information technology, non-consulting services and consultant services. The envisaged goods and services would be attained from either the local market or the international market based on the World Bank Procurement Regulations. Procurement activities envisaged under the program shall include:

- IT equipment for Technical Data Center;
- Procurement of financial system for PMU;
- Selection of IVA;
- Capacity Building through twining with The Netherlands Utility (Water Net);
- Development of WSS information system and deployment to at least 6 selected WSCs;
- PMU staff and consultants.

191. It is expected that the WSS information system will include activities as follows:

- a. Design of the WSS information system
- b. Development of standardized indicators to be used to measure WSC's performance
- c. Harmonization activities on existing WSC's information systems. Currently there are a few information systems in place in the WSS sector, with different geographical scopes, purposes, periodicity and indicators. The Program will support harmonization of data collection protocols, indicators and definitions.
- d. Benchmarking system. EWRA will gradually make WSC's performance information public and user-friendly. An annual compendium of data from the WSC's will be published including comparisons between WSC's and over time. An analytical report and an interactive website offering benchmarking results are among the options under consideration.



192. Procurement under the IPF component will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers, dated July 2016, revised November 2017, the loan agreement and the procurement plan approved by the Bank. The "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006, and updated January 2011 and July 1, 2016, will also apply. A procurement plan for the first 18 months of project implementation was prepared and approved.

193. The financial management implementation of the IPF component will also be supported by the PMU staff supporting the PforR operations. This will include budget preparation, preparing withdrawal applications for disbursements, maintaining accounting records, reporting and liaising with the external auditor. Disbursements will use traditional SOE based withdrawal applications to be submitted quarterly. IFRs for the IPF component will be required on a quarterly basis, in addition to the annually audited Program financial statements. A single audit is required for the whole program, including the IPF component.

### Annex 9: Rationale for Climate Co-benefits

DLI/ DLR	SRSSP AF (USD million)	Vulnerabilities to climate change	Rationale for adaptation	Rationale for mitigation
DLI 1: Establishment and functioning of at least 178,317 new HH connections to working sanitation systems in villages and satellites of which at least 10% of the connections are in satellites.	\$30 <sup>25</sup>	Less freshwater resources due to droughts, higher intensity of surge storms, rising sea levels and higher temperatures and heat waves	Working sanitation systems include providing adequate wastewater treatment for sewage that is being currently discharge without treatment polluting freshwater bodies, which will improve the available sources of freshwater. The sanitation system also directly mitigates impacts of surge storms as it drains water in serviced villages. The siting of new assets will take into consideration the vulnerable areas for rising sea levels, and will take into consideration the rising temperature while designing biological treatment	N/A
DLI 2: Annual transfer of Performance-based Capital Grants (PBCG) by MHUUC to eligible WSCs pursuant to the provisions of paragraph 6 of Section I.C of Schedule 2 to this Agreement [i.e., the SRSSP Loan Agreement]	\$32	Less freshwater resources due to droughts, higher intensity of surge storms	PBCBs will enable WSCs to undertake investments in sanitation and water supply infrastructure, which will enhance the resilience of beneficiaries to impacts of climate change.	N/A
DLI 3: Design and implementation of the APA system for the WSCs, and WSCs achievement of the required APA weighted index scores in accordance with the Program Operations Manual.	\$150	Higher intensity of surge storms	PIAPs include a KPI on reporting sewerage-related flooding events, which will inform measures to reduce this flooding.	Higher energy efficiency will be one of the main objectives of the APAs, as utilities will need to reduce energy costs, especially after the rise in energy prices, to achieve better financial performance.

<sup>25</sup> Excludes AIIB co-financing.

DLI/ DLR	SRSSP AF (USD million)	Vulnerabilities to climate change	Rationale for adaptation	Rationale for mitigation
				Higher energy efficiency will be achieved through improved operational procedures, better design of networks (including utilization of shallow network when possible) to minimize pumping costs and purchasing of more energy efficient equipment in pump stations and WWTPs
DLI 4: Preparation and approval of a new national tariff structure for water supply and sanitation services by MHUUC to allow for sustainable cost recovery.	\$0	N/A	N/A	N/A
DLI 5: Establishment of PMU and approval of a National Water and Sanitation Sector Strategy by MHUUC.	\$12	Less freshwater resources due to droughts, higher intensity of surge storms, rising sea levels and higher temperatures and heat waves	Climate risk considerations and adaptation measures will be included in the SESA of the strategy.	Climate-smart investments to improve energy efficiency will be included in the SESA. This is eligible for mitigation co-benefits under 9.1: Support to national, regional or local policy, through technical assistance or policy lending of the MDB List of Eligible Mitigation Activities
DLI 6: SOPs for land acquisition developed under the Program updated by MHUUC acceptable to the Bank approved for implementation.	\$9.25	Less freshwater resources due to droughts, higher intensity of surge storms	WWTPs will reduce the flow of effluents into waterways, and can be considered an adaptation measure, since water scarcity has been linked to climate change.	N/A

DLI/ DLR	SRSSP AF (USD million)	Vulnerabilities to climate change	Rationale for adaptation	Rationale for mitigation
DLI 7: Strengthen the national regulatory framework for Water and Sanitation.	\$31	Less freshwater resources due to droughts, higher intensity of surge storms	EWRA mandates includes improve utility efficiency and operationalizing of a WSS information system and M&E system for the utilities. This will include benchmarking utilities performance for certain indicators related to climate resilience such as reduced sewerage blockage, reduced non-revenue water and improved response to emergency drainage after surge storms	The benchmarking of utilities performance will also include energy efficiency indicators that will motivate the utilities to introduce measures that will reduce energy consumption including improving energy efficiency of the design of sewerage networks and the purchase of more efficient equipment, as indicated above.
DLI 8: Approval of a financial and tariff model that allows for sustainable cost recovery of water and sanitation services.	\$20	Less freshwater resources due to droughts, higher intensity of surge storms	The financial and tariff model will incentivize better performance especially in reducing non-revenue water and improving efficiency of sanitation services.	The financial and tariff model will incentivize better financial performance including energy savings. This is eligible for mitigation co-benefits under 9.1: Support to national, regional or local policy, through technical assistance or policy lending of the MDB List of Eligible Mitigation Activities
IPF TA	\$15	Less freshwater resources due to droughts, higher intensity of surge storms, rising sea levels and higher temperatures and heat waves	IPF-TA will include design works that will enable the utilities to achieve the designs of sanitation system that would achieve adaptation benefits listed under DLI1. It will also include capacity building of EWRA in their regulatory tasks to achieve the adaptation benefits under DLI7.	IPF-TA will include capacity building of EWRA in their regulatory tasks to achieve the mitigation benefits under DLI7.