

THE AFRICAN DEVELOPMENT BANK GROUP



PROJECT APPRAISAL REPORT WATER RECYCLING FOR AGRICULTURE - GABAL EL ASFAR WASTEWATER TREATMENT PLANT - STAGE III

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CURRENCY EQUIVALENTS

As of April 2022,

Currency Unit		Equivalent
1 UA	=	1.38240 USD
1 UA	=	1.24529 EU
1 UA	=	25.25341 EGP
1 EU	=	20.27914 EGP
1 USD	=	18.26780 EGP

FISCAL YEAR

1 July – 30 June

WEIGHTS AND MEASURES

1 Metric ton	2,204.62 Pounds (lbs)
1 Kilogramme (kg)	2.20462 lbs
1 Meter (m)	3.28 Feet (ft)
1 Millimetre (mm)	0.03937 Inch (“)
1 Kilometre (km)	0.62 Mile
1 Hectare (ha)	2.471 Acres

ABBREVIATION AND ACRONYMS

ACCF	Africa Climate Change Fund
ADB	African Development Bank
ADF	African Development Fund
AFD	French Development Agency
AfDB	African Development Bank
AGTF	Africa Growing Together Fund
CAPW	Construction Authority for Potable Water and Wastewater
CFRA	Country Fiduciary Risk Assessment
COEG	Country Office Egypt
CPIA	Country Policy and Institutional Assessment
CRFA	Country Resilience and Fragility Assessment
CSP	Country Strategy Paper
CSS	Climate Safeguard System
DPG	Development Partners Group
EA	Executing Agency
EEAA	Egyptian Environmental Affairs Agency
EIB	European Investment Bank
EIRR	Economic Internal Rate of Return
EPC	Engineering, Procurement, and Construction
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESCON	Environmental and Social Compliance Note
EU	European Union
EWRA	Egyptian Water Regulatory Agency
FSER-SP	Food Security and Economic Resilience Support Program
GCF	Green Climate Fund
GIZ	German Agency for International Cooperation
GoE	Government of Egypt
HCWW	Holding Company for Water and Wastewater
FC	Foreign Currency
FIRR	Financial Internal Rate of Return
FM	Financial Management
GHG	Green House Gases
IsDB	Islamic Development Bank
IWRM	Integrated Water Resources Management
KfW	(German Bank for International Development Financing)
KFAED	Kuwait Fund for Arab Economic Development
LC	Local Currency
M&E	Monitoring and Evaluation
MHUUC	Ministry of Housing, Utilities, and Urban Communities
MoIC	Ministry of International Cooperation
MIC TAF	Middle Income Countries Technical Assistance Fund
MWRI	Ministry of Water Resources and Irrigation
NCB	National Competitive Bidding
NPV	Net Present Value
NWRP	National Water Resources Plan

OCB	Open Competitive Bidding
O&M	Operation & Maintenance
PAR	Project Appraisal Report
PCN	Project Concept Note
PCR	Project Completion Report
PIT	Project Implementation Team
PIU	Project Implementation Unit
PLW	People Living with Disabilities
RAP	Resettlement Action Plan
PPP	Public Private Partnership
PSC	Project Steering Committee
SEAH	Sexual Exploitation and Harassment
SDG	Sustainable Development Goals
TYS	Ten Years Strategy
UA	Unit of Account
USD	United States Dollar
WSS	Water, Wastewater and Sanitation
WB	The World Bank
WWTP	Wastewater Treatment Plant

PROJECT INFORMATION SHEET

CLIENT INFORMATION

Project Name	WATER RECYCLING FOR AGRICULTURE - GABAL EL ASFAR WASTEWATER TREATMENT PLANT - STAGE III
Sector	Agriculture / Water and Sanitation
Borrower/Grant Recipient	The Arab Republic of Egypt
Project Instrument	ADB loan (Euro 80 million), AGTF loan (Euro 30 million), AFD loan (Euro 50 million), AFD grant (1.5 million Euro), EU Investment Grant (Euro 10 million).
Executing Agency	Construction Authority for Potable Water and Wastewater (CAPW), Ministry of Housing, Utilities and Urban Communities (MHUUC)

COUNTRY AND STRATEGIC CONTEXT

Country Strategy Paper Period:	2022-2026
Country Strategy Paper Priorities supported by Project:	Priority Area 2 – Building resilience to achieve food and water security and energy efficiency
Government Program (PRSP, NDP or equivalent):	Sustainable Development Strategy (Egypt's Vision 2030) and Egypt 5-year Macroeconomic Framework and Strategy 2019/20-2023/24.
Project classification:	<p>Relevant High 5s: mainly Feed Africa and improving the Quality of life of people in Africa</p> <p>The project is aligned to Egypt's Sustainable Development Strategy: 2030 Vision. SDG 6.2.1 Sanitation and Hygiene: Current Coverage for Sanitation 66.7% (2022) to reach 98% by 2030</p> <p>Project fits well with the Bank's Policy on Water (2021) and the Water Strategy (2021-25) as it aims to increase access to well-managed sanitation services and promote the water-food-ecosystems nexus and circular economy approaches through enhanced availability of treated wastewater for agricultural purposes and for environmental sustainability.</p> <p>Furthermore, project is aligned to the Priority Area III of the Bank's 2022-2026 Strategy for Addressing Fragility and Building Resilience on Building Resilient Societies.</p>
Country Performance and Institutional Assessment¹:	Overall CPIA Rating for 2021: 3.394; Fourth quintile
Projects at Risk in the country portfolio:	Zero project at risk 35% of red flagged operations, (July 2022)

PROJECT CATEGORISATION

Environmental and Social Risk Categorization	Category 1 as per the AfDB ISS (BS# 05), confirmed by the Categorization memorandum approved by the Bank on May 20 th , 2021.
Does the project involve involuntary resettlement?	No
Climate Safeguards Categorization:	The initial assessment of the CSS (Category 3, very low climate vulnerability / risks)
Fragility Lens Assessment:	[Draft in Finalization]
Gender Marker System Categorization:	Category 3 of Gender Marker System (GMS)

ADB and AGTF key financing information

¹ Obtain CPIA rating here - [Country Policy and Institutional Assessment \(afdb.org\)](https://www.afdb.org/en/knowledge/publications/country-policy-and-institutional-assessment) (VPN required)

Loan Type	Fully Flexible Loan
Loan Currency	EUR or any other approved Bank lending Currency
Tenor	23 years inclusive of Grace Period
Grace period	6 years
Average Loan Maturity*	14.75
Repayments	Consecutive semi-annual and equal payments after grace period
Payment Date	15 May and 15 November.
Interest Rate	Base Rate +Funding Cost Margin+ Lending Margin + Maturity Premium This Interest Rate will be floored to zero.
Base Rate	Floating Base Rate (Daily SOFR Compounded in Arrears for USD, Daily TONA Compounded in Arrears for JPY or 6-month EURIBOR for EUR reset each 1 st February and 1 st August; 3-month JIBAR for ZAR resets each 1 st February 1 st May 1 st august and 1 st November 1 st) A free option to fix the Base Rate is available
Funding Cost Margin	The Bank funding cost margin as determined each 1 st January and 1 st July and applied to the Base Rate each 1 st February and 1 st August
Lending Margin	80 basis points (0.8%) since 1 st September 2016.
Maturity Premium	- 0,10%
Front-end fees	0.25% of the loan amount due at loan effectiveness and payable at the earliest of (i) up to 60 days from Loan Effective Date or (ii) at the time of first disbursement. If the loan is partially or fully cancelled after the Loan Effective Date, the Front-end fee is still due on the full loan amount and no refund is made. The borrower has the option to pay the Front-end Fee: (i) either from its own resources, or (ii) by deducting its amount from the loan proceeds at the first disbursement.
Commitment fees	0.25% of the undisbursed amount. Commitment fees start accruing 60 days from signature of the loan agreement and are payable on payment dates including during the grace period. The Commitment fee ceases to accrue upon full disbursement or full cancellation of the loan.
Option to convert the Base Rate**	In addition to the free option to fix the floating Base Rate, the borrower may reconvert the fix rate to floating or refix it on part or full disbursed amount. Transaction fees are payable.
Option to cap or collar the Base Rate**	The borrower may cap or set both cap and floor on the Base Rate to be applied on part or full disbursed amount Transaction fees are payable.
Option to convert loan currency (<i>Except for AGTF</i>) **	The borrower may convert the loan currency for both undisbursed or disbursed amounts in full or part to another approved lending currency of the Bank Transaction fees are payable.
Hedge unwinding or adjustment costs	Any costs incurred by the Bank in adjusting or terminating the conversions are passed to the borrower.

Source	Amount (millions)		Financing Instrument
	UA	EURO	
African Development Bank	64,242,064	80.00 million	ADB Loan
Co-financier 1: AGTF	24,090,774	30.00 million	AGTF Loan
Co-financier 2: AFD	40,151,290	50.00 million	Loan
Co-financier 3: EU	8,030,250	10.00 million	Investment Grant
Government Counterpart Contribution:	188,711,063	235.00 million	Cash & In Kind
Total Project Cost:	325,225,000	405.00 million	
AFD	1,204,538	1.5 million	Grant

Source	Amount (millions)		Financing Instrument
	UA	EURO	
MIC-TAF	230,000	0.3 million	Grant

PROJECT DEVELOPMENT OBJECTIVE AND COMPONENTS

Project Development Objective:	
Project Components:	Wastewater Infrastructure Expansion for water recycling into agriculture (Euro 343.6 million), and 2 years O& M (Euro 10 million)
	Engineering Services & E&S (Euro 13.6 million)
	Project Management, and Institutional Support (Euro 0.2 million)
	Contingency for both physical and price (Euro 37.6 million)

PROJECT PROCESSING SCHEDULE TO BOARD APPROVAL

PCN Approval:	15 December, 2021
Appraisal Mission:	15 February, 2022
Re-Appraisal Mission:	19 September, 2022
Planned Board Presentation:	9 November, 2022
Effectiveness:	15 April, 2023
Project Implementation Period:	[1 January 2024- 31 December 2029]
Planned Mid-term Review:	[July - December 2025]
Project Closing Date:	31 December, 2029

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1 STRATEGIC CONTEXT

A. Country Context, Strategy and Objectives

1. Egypt's development strategy is built around the "Sustainable Development Strategy: 2030 Vision", the Government Action Program "Egypt Takes Off", and the recent Cabinet's comprehensive reform program. The vision is being implemented through five-years action plans. The GoE is launching its second phase of "Egypt Takes Off" for 2023-2027. This new program builds on the previous milestones achieved by the 2018-2022 program which has put the foundation for a successful development trajectory for the Egyptian economy. The top priorities of the GoE in its new program 2023-2027 are: (i) promoting green economy and achieving water, food and energy security; (ii) increasing investment in health and education sectors and (iii) introducing new regulatory reforms aiming to facilitate the engagement of the private sector into the economic development process of Egypt. In order to position Egypt for a swift and sustainable recovery from the Covid-19 crisis, the GoE announced in May 2021 a second phase of the program namely the "National Structural Reforms Program (NSRP)". The program targets the real sector with fundamental and beneficial structural reforms, to build a stronger and more resilient and inclusive growth. Under this second phase of the national reform program, the main focus

Box 1 - The Food-Water-Energy Nexus (see Appendix VII)

In recent years the Nexus concept between food water and energy has received attention, first from the academic world and then from decision-makers. The basic principle of this Nexus is based on that the chains of production or use of these three resources are intrinsically linked, and in several cases interdependent. This interdependence and the resulting trade-offs in the use or production of these three factors will become more pronounced in the coming decades as population size increases, urbanisation accelerates, living standards rise and climate change influences the availability and use of land, water, and energy resources. From a global point of view this is strong. The agriculture is responsible for 70% of the world's freshwater withdrawals. This share rises to 90% of "non-recycled" water because, unlike other users, agricultural water does not immediately return to the water cycle (sequestration in foodstuffs, runoff, evapotranspiration). This trend is likely to strengthen in the coming years because, according to the FAO, food production should increase by 60% by 2050 to feed the world's population. This should result in a 10% increase in water consumption by irrigated areas.

From an energy perspective it is estimated that between a quarter and a third of global consumption is due to food production and supply systems. Furthermore, global energy consumption is expected to increase by 50% by 2035 according to the IAEA. This consumption has accelerated with, among other things, the production of fertilisers, the mechanisation of production, the development of irrigation and the transformation processes within the agro industry.

Among available options to strengthen the sustainability of the nexus, water recycling in agriculture is one of the most promising ways to enhance food security while reducing the impact of agriculture on water withdrawals. **This can be coupled with the use of renewable energy along the production chain.** This recycling requires three prerequisites: i) a technology that makes it possible to achieve a sufficient quality of treated water (in terms of mineral & organic residues and biological contaminants); ii) a regulatory framework allowing the use of this water in agriculture (with adequate control mechanisms); iii) an appropriate pipe network for transporting water from the sanitation site to the irrigation site (or even for recharging). It should be noted that the use of treated wastewater in agriculture can follow different paths depending on the technologies used and the quality of the water. The use of these resources for arboriculture is easier than for market gardening and needs less level of treatment. Indeed, biological contamination of products intended for consumption is less important in arboriculture.

will be on increasing the weight of the following sectors: (i) Manufacturing (ii) Agriculture and (iii) Information and Communication Technology, in the productive structure of the Egyptian Economy. The proposed operation is aligned with the country's strategic framework, and it is one of the priority projects identified by the Government. The proposed operation is aligned with this strategic framework. Egypt updated the National Water Resources Plan (NWRP) to cover the period up to 2037. The emphasis of the NWRP is to layout the principles and actions of how Egypt would safeguard its water resources in terms of quantity and quality and how it would utilize the resources to advance on its socio-economic development while preserving the environment and ecosystem. The plan, which was based on the Integrated Water Resources Management (IWRM) principles focuses on four strategic pillars: (i) enhancing and ensuring availability of freshwater; (ii) improving quality of water resources; (iii) improving efficiency of water usage; and (iv) improving the enabling environment for IWRM planning and implementation. The proposed operation is aligned with all these pillars to various degrees of significance.

2. The proposed operation is aligned with the Bank's framework and its current strategic priorities. It is aligned with the objectives and priorities of Egypt's CSP 2022-2026 for Egypt is articulated around the following two Priority Areas: Priority Area 1 – “Strengthening the country's competitiveness to support robust private sector led growth and job creation”; and Priority Area 2 – “Building resilience to achieve food and water security and energy efficiency”. The proposed operation is aligned with priority area 2 and will contribute to achieve the strategic result 2.1 “Improve integrated water resource management and recycling to increase agriculture production”. It aims to improve environmental sustainability and quality of life of people and increase available water resources from the re-use of treated wastewater in agriculture. The project objective is aligned with the Bank's High's Agenda and the Bank's Ten-Year Strategy through development of critical infrastructure and contribution to green growth, focusing on improving quality of life of people and Feed Africa. It fits well with the Bank's IWRM policy as it aims to enhance the availability of good quality water for environmental sustainability and productive purposes. The project is also aligned with the Bank Group's new 2021-2024 water sector policy and strategy approved in 2021 and with Bank's Private Sector Development policy, particularly in promoting local entrepreneurship.

B. Sector and Institutional Context

3. Food security is a key issue in Egypt due to the scarcity of water resources, arable land, and high population density. Egypt imports about 40% of its food requirements and incurs a total food import bill of USD 2.5bn per year. In addition, agriculture is a key sector, providing livelihoods for 55% of the population and directly employing about 24% of the labour force². The country's Sustainable Development Strategy “Vision 2030” places emphasis on increasing self-sufficiency, especially of cereals. However, such a strategy is at variance with the low economic value of cereals compared to the water used and scarcity of arable lands. Egypt is indeed an arid country with very limited rainfall and increasing water demand due to population increase with agriculture being the major water user, consuming about 70% of the water resources³.

² Country agriculture strategy document, IFAD, FAO, and World Development Indicators 2021

³ Food and Agriculture Organization (FAO)

4. In parallel Egypt's future needs careful attention regarding the plausible implications of declining water per capita availability due to population growth, limited water resources and climate change. Hence, the GoE has been ardent in strategically partnering with its major DPs in targeting areas where climate impact underlines a need for action through the launch of Egypt's Country Platform Nexus on Water, Food and Energy (NWFE- نُوفِي) Program along with Egypt's National Climate Change Strategy 2050. To overcome these challenges, the GoE is putting in place a paradigm shift, which optimizes the value of water through its reutilization. This protects and enhances the quality of water in the River Nile, canals and drainage systems while allowing the reutilization of water for other purposes (ecosystems, agriculture, production, etc.). As part of the National Water Resources Plan (NWRP), which identifies measures of water quality improvement in the water bodies, including increasing and enhancing the municipal WWTP, the GoE considers the expansion of Gabal El-Asfar (GEAWWTP) as one of the higher priorities.

5. Given this, the sustainable use of water resources is being promoted through awareness campaigns conducted by state bodies and the optimisation of water withdrawals. Even so, to close the gap between the limited water resources available and water demand requires investments for the development of supplementary water sources and water management mechanisms for agriculture. In this direction, efforts are underway to transform the irrigation system in Egypt into modern irrigation techniques (i.e., drip system, sprinklers, etc.). Innovative options to develop water resources for agricultural use are critically needed and actively promoted.

- Firstly, protecting and enhancing the quality of water in the River Nile, canals and drainage systems is one of the several interventions to address this challenge. The water bodies (as the agriculture drainage system) receive heavy load of municipal wastewater, some of them partially treated or untreated, which deteriorates the water quality and endangers public health. To revert this situation, the National Water Resources Plan (NWRP) identified measures of water quality; improvement in the water bodies, which includes increasing and enhancing the municipal wastewater treatment plants.
- Secondly, the Egyptian authorities have developed a new approach to actively use treated wastewater for irrigation. As part of this approach, the expansion of Gabal El-Asfar WWTP has been considered among the higher priorities by the GoE. The extension of the WWTP will be supplemented by two water recycling plants of 1 million m³/day and 5.6 million m³/day at El Mahasama, El Ismailia, and Bahr El-Baqar at the west Bank of Suez Canal, respectively, using ultra filtration techniques. For example, the main aim of the Bahr El-Baqar water recycling plant downstream of Gabel El-Asfar is the cultivation of 400,000 feddans at Lake Manzala and eastern bank of Suez Canal in Sinai Peninsula (For more details, please see Technical Annexes – Annex 5).
- The funding, provided in a challenging global context, will help meet the Government of Egypt's financing requirements in the light of the COVID-19 pandemic and Russia/Ukraine conflict (i.e., availability of wheat and clean source of water, and improving the aquaculture), and support food security, sound water and sanitation services and treated water reuse, a key enabler for the country's development and green economy through the recycling of treated wastewater in Agriculture and increasing the arable land. Moreover, it will support the country for green resilience so to increase the cereal production to overcome the international crises of the recent war in the Europe increasing the wheat prices by 70% in year 2022 in comparison to the price the previous year.

C. Rationale for Bank's Involvement

6. Since 2009, the Bank has been involved in Egypt's agriculture and water sector in an integrated fashion mainly through the financing of the National Drainage Project, Gabal El-Asfar Wastewater Treatment Plan Phase 2 project, Abu Rawash WWTP with a similar objective as the proposed intervention at Gabel El-Asfer Phase III. The Bank also supported the Helwan Wastewater Treatment Plant PPP Transaction Advisory study to enable the GoE to make informed judgment and decisions regarding the implementation approach and financing strategy. In view of the Bank's recent activities in similar initiatives in the country, the GoE submitted its financing request to the Bank demonstrating GoE's confidence in the ability of the Bank to provide technical support and financial resources to fund the proposed project. The Bank's intervention will contribute to bridging the GoE's financial gaps, as Egypt strives to improve environmental sustainability and quality of life in line with its Sustainable Development Strategy: Vision 2030.

7. The Water Recycling for Agriculture – Gabel EL Asfar Wastewater Treatment Plant project is designed in synergy with the budget support operation “The Food Security and Economic Resilience Support Program” (FESR-SP) thereby ensuring complementarity in Bank's operations in Egypt to prevent the Food Crisis. The FESR-SP is the first Bank's support to one of its RMCs within the framework of the African Food Crisis Response and Emergency Facility. This budget support operation will support actions undertaken by the GoE to mitigate the impact of the global compounded shocks on the domestic economy and preserve its resilience, notably to the food crisis. The FESR-SP support measures to stabilize local prices and raise local food production, contributing to averting a food crisis, whose brunt often falls heavily on the vulnerable groups. It also supports measures to promote the use of treated wastewater for agricultural purposes, thereby promoting the efficient use of water resources.

8. The Bank's on-going portfolio in Egypt consists of 24 operations with a total commitment of UA 839 million (as of March 2022). The sectoral distribution of the ongoing portfolio is constituted of sovereign and non-sovereign operations in power (71.0%); water and sanitation (21.1%); irrigation and agriculture (4.6%); social (0.6%); finance (1.7%); and multisector (capacity-building grants) (1.0%). The performance of the Bank's portfolio in Egypt is assessed as satisfactory, with none “at-risk” operations. In addition, there are no backlog on Project Completion Reports.

D. Development Partners Coordination

9. **Several development partners (bilateral and multi-lateral DPs) are supporting the agriculture, and water sector in Egypt. Key sector supporters, in addition to the Bank, are the World Bank (WB), AIIB, EU, KfW, AFD, EBRD, EIB, USAID, GIZ, Arab Funds, IsDB, the Government of Netherlands, and others.** The DPs support includes investment operations, institutional and sector reforms, and technical assistance to enhance capacity building. The Bank is very active and collaborates with all DPs through the Development Partners Sub-Group on Agriculture and Sub-group on Water. The main development partners active in the sector are the World Bank (WB), Asian Infrastructure Investment Bank (AIIB), the European Union (EU), the Kreditanstalt für Wiederaufbau (KfW), the European Investment Bank (EIB), the European Bank for the Reconstruction and Development (EBRD) and the French Development Agency (AFD), amongst others. The DPs support not only investment projects but also institutional and sector reforms in

Agriculture, water supply, and sanitation, through technical assistance to enhance capacity building and update subsector strategies. The WB & AIIB are currently supporting the National Rural Sanitation Program using the Program-for-Results (PfR) instrument for an amount of 1.15 billion USD. The WB, with other donors, is also supporting sanitation services in rural areas through the Integrated Sanitation and Sewerage Infrastructure Project (ISSIP I and II). The AFD, EIB, European Union and KfW are embarking on a large water and sanitation project (WSP I and II) comprising an important institutional support to Associated Companies, Alexandra East and West WWTP. According to Egypt new strategy, the treated wastewater will be recycled for the re-use in agriculture that empower the nexus between Agriculture-Water and Energy through the use of Biogas to generate electricity (Gabel El-Asfer WWTP) and use the treated wastewater for Agriculture (Abu Rawash WWTP). On other hand the Bank is currently financing the National Drainage Program III with KfW, EU, and the IsDB.

10. During the preparation mission, the Bank's project team held several bi-lateral meetings with the key partners, especially with the AFD, EU, and EIB, who are a potential financing partners for water projects. Accordingly, a joint financing agreement with AFD (and EU), was negotiated and agreed upon for financing this project.

2 PROJECT DESCRIPTION

A. Project Development Objective

11. The project's development objective is to: i) improve environment sustainability by protecting the environment and water resource from pollution and to reduce health risks due to discharge of untreated wastewater to the drains and canals; ii) boost agriculture production through increasing water re-use for food security. The main outcomes of the project are a) provide treated wastewater for new arable land of "70,000 Acres"; b) increase or expand the treatment plant's capacity by 1.0 million m³/day (third stage) from 2.5 million m³ to 3.5 million m³ per day of both primary and secondary treatment so that increasing the direct beneficiary by 5 million people from 12.5 million to 17.5 million people. Provision of secondary treatment facilities is essential to meet effluent standards in Egypt and to improve the water quality environment of the drainage system. attention should be given to ensure that the project outcomes will not have a negative (economic, social, and/or environmental) side effect on targeted (or non-targeted) populations.

B. Theory of Change

12. Due to emerging water scarcity issues, national conditions (i.e., population increase, deterioration of water quality, etc.) and international conditions (i.e., increasing regional demand, international instability (European crises/conflict), cost, etc.), the GoE adapted several measures to cope with those incidents as such: (i) raise desalination capacity from 1 to 8 million m³/day⁴; (ii) enhance water quality to recycle that water in agriculture (this project). The change solution is to improve the water quality through the construction of wastewater treatment plants so that improve the effluents for recycling and increase the water available to expand agriculture lands. Thus, the main project outcomes are: a) increasing arable lands by 70,000 acres; b) increasing access to safely managed sanitation services; c) increasing compliance of the quality of wastewater effluent released from the WWTP, to meet national standard for different uses (agriculture, aquaculture, etc.); d) increasing job

⁴ The desalination strategy for Year 2050, MHUUC

creation and social participation at the construction level, and agriculture development; and f) ensuring sustainable operation and maintenance (i.e., green energy produced by the plant extension (recycled)).

C. Project Components

13. The project is composed of 3 components with a total amount of € 405 M including the GoE contribution, contingency, and the details are as follows:

Component 1: Wastewater Infrastructure Expansion for water recycling into agriculture (Euro 353.6 million)

14. Wastewater Infrastructure Expansion for water recycling into agriculture (Euro 343.6.5 million) by ADB, EU, AFD and GoE, and 2 years O&M (Euro 10 million), to be financed by AFD and GoE.

The Outputs of this component from the additional financing are to:

- Expand the existing plant capacity by additional 1,000,000 m³/d to reach a total plant capacity of 3.5 million m³/day with primary and secondary treatments.
- Including 2 years O&M that will be financed from the GoE and AFD;

Component 2: Engineering Services and E&S Management (Euro 13.6 million)

15. The Outputs of this component from the additional financing are to:

- Engineering supervision.
- M&E Management, ESMP, and E&S Audit

Component 3: Project Management, Environment, Social, Climate Change and Institutional Support, (Euro 0.2 million)

16. The Outputs of this component from the additional financing are to:

- Capacity building to address institutional development and sustainability at Construction Authority for Potable Water and Wastewater (CAPW).
- Public outreach to sensitize communities, water user associations, agricultural committees on good practices and benefits of the project and safe re-use of effluent,
- Undertake studies to identify and design agricultural interventions for the benefit of the existing communities, and
- Financial Management, Audit, etc.

Contingency: physical and price (Euros 37.6 million)

D. Project Cost and Financing Arrangements

17. The total cost of the Project is estimated at Euro 405 million (equivalent UA 325 million), including taxes and duties that will be paid from the local contribution, of which loan amount is Euro 160 million (39.5%) in foreign currency, Euro 235 million (58.0%) in local currency, covered from local contribution, and 10 million Euro (2.5%) investment grant from EU that will be managed by the AFD. Table 1 below provides estimated cost by Component. These estimates are based on information provided by the executing agency including construction cost, engineering services, project management, 2 years operations & maintenance. In addition, physical and price contingency of 10% has been applied. The net project cost is estimated at 360.7 million Euros, and Taxes/VAT/Customs is estimated at 44.3 million Euros (approximately 11%) that will be covered from the local contribution as allocated in the budget of the EA.

18. The Project will be financed by AfDB, AGTF, AFD, EU and GoE as shown in the project source of financing presented in Table 2. The total Bank Group financing is Euro 110 million, comprising of AfDB loan of Euro 80 million and AGTF loan of 30 million, AFD loan of Euro 50 million, and EU investment grant of 10 million Euros. These funds will be used to finance the different components of the project. GoE will contribute 58.0% (including taxes, VAT, Customs) of the total project cost in EGP (equivalent to Euro 235 million). Details of ADB and AGTF, AFD, EU financing are provided in Annex 2-3. EU finance will be used to support the GoE finance in works and consultancy services. The loan resources in foreign currencies will be mainly used for the electromechanical works and will be excluding taxes.

Table 1: Estimated Cost of the Project by Component

Components	Currency			% of Total Project Cost
	Foreign Currency (EUR)	Local Currency (EGP)	Total (EUR)	
Component 1: Wastewater Infrastructure Expansion for water recycling into agriculture including O&M for 2 years	146,000,000	3,952,000,000	343,600,000	84.84%
	2,500,000	150,000,000	10,000,000	2.47%
Component 2: Engineering and other Services (E&S Management, ESMP)	8,000,000	112,000,000	13,600,000	3.36%
Component 3: Project Management, Environment, Social, Climate Change and Institutional Support	-	4,000,000	200,000	0.05%
Total Base Costs	156,500,000	4,218,000,000	367,400,000	90.72%
Physical contingencies	9,400,000	188,000,000	18,800,000	4.64%
Price contingencies	9,400,000	188,000,000	18,800,000	4.64%
Total Project Costs	175,300,000	4,594,000,000	405,000,000	100%

Table 2: Project sources of financing

Sources of financing	Costs (UA)	Costs (Local Currency)	% of Total Project Cost
African Development Bank (AfDB)	64,242,064	1,600,000,000	19.75%
African Development Bank (AGTF)	24,090,774	600,000,000	7.41%
AFD	40,151,290	1,000,000,000	12.35%
EU	8,030,258	200,000,000	2.47%
Government of Egypt	188,711,063	4,700,000,000	58.02%
Total Project Costs	325,225,449	8,100,000,000	100.00%

Table 3: Project cost by category of expenditures

Category	(Currency)				% of Base Total Cost	% of Total Project cost
	F.E.	L.C.	Total	Net Total (Exclusive Taxes)		
Works	0	2,390,200,000	119,510,000	107,700,000	32.53%	29.51%
Goods (Electro-mechanical Works)	146,000,000	1,561,800,000	224,090,000	191,600,000	60.99%	55.33%
Services	8,000,000	112,000,000	13,600,000	13,600,000	3.70%	3.36%

Operating Costs	2,500,000	150,000,000	10,000,000	10,000,000	2.72%	2.47%
Project Management (E&S)	0	4,000,000	200,000	200,000	0.05%	0.05%
Total Base Costs	156,500,000	4,218,000,000	367,400,000	323,100,000	100.00%	90.72%
Physical contingencies	9,400,000	188,000,000	18,800,000	18,800,000		4.64%
Price contingencies	9,400,000	188,000,000	18,800,000	18,800,000		4.64%
Total Project Costs	175,300,000	4,594,000,000	405,000,000	360,700,000		100.00%

Table 4: Project Expenditure Schedule

Component	(Currency in EURO '000)							
	Y2023	Y2024	Y2025	Y2026	Y2027	Y2028	Y2029	Total
Component 1: WWTP	0	50,000	70,000	80,000	90,000	53,600	0	343,600
Operation & Maintenance	0	0	0	0	0	2,500	7,500	10,000
Component 2: Engineering Services	1,000	3,000	3,000	2,000	2,000	2,000	600	13,600
Component 3: Project Management & E&S Strengthening	5	30	40	40	35	30	20	200
Total Base Costs	1,005	53,030	73,040	82,040	92,035	58,130	8,120	367,400
Physical contingencies	0	4000	4,000	4,000	3,000	3,000	800	18,800
Price contingencies	0	4000	4,000	4,000	3,000	3,000	800	18,800
Total Project Cost	1,005	61,030	81,040	90,040	98,035	64,130	9,720	405,000

E. Project's Target Area and Population Beneficiaries and other Stakeholders

19. The GEAWWTP is located in East Cairo and its catchment area consists of the greater part of Cairo. In terms of wastewater treatment and improved sanitation coverage, the plant currently serves 12.5 million persons directly⁵, however upon completion, it will directly benefit more than 17.5 million people located in the urban areas covering the following governorates: Cairo, Qaliobia, Sharqia, and Ismailia. A second group of direct beneficiaries include people living in villages downstream of the plant and along the system draining the effluent from the plant into Bahr El Baqar drain, estimated to be around 1 million persons, which will benefit from an improved environment and consequent reduction of diseases associated with untreated wastewater. Indirect beneficiaries include farmers and fishermen around Lake Manzala and in the Sinai Peninsula who will benefit from additional sources of water for agriculture and irrigation purposes.

20. Consultations regarding the project started since 2017 and continued during preparation mission in 2020 for Phase A and September 2021 for Phase A and Phase B and the appraisal mission by February 2022. In addition, intergovernmental consultations among relevant institutions have been going on since 2017. Institutions consulted include CAPW, Ministry of Housing, Utilities, and Urban Communities, Ministry of International Cooperation (MoIC), Holding Company of Water and Wastewater (HCWW), Ministry of Water Resources and Irrigation, and Ministry of Health. DPs, namely AFD, WB, KfW, EU, EIB, EBRD, and JICA were met. Visit to the proposed project site for infrastructure and outlet of the drainage was carried out. Consultations and discussion with beneficiary communities surrounding the wastewater treatment plan, beneficiaries from downstream along the drainage of Gabel El-Asfar during the preparation of the ESIA.

⁵ The number of beneficiaries is calculated based on daily drinking water consumption of 200 liters

21. The primary and secondary treatment of the wastewater at Gabel El-Asfer WWTP will mitigate the health hazards and provide cleaner water that can be used for increasing the arable land with 400,000 acres in Sinai Peninsula in accordance with the 'Egyptian Code of 501/2015 for the reuse of wastewater'. The project will benefit the population living along the Bahr El Bakr Drain, Lake Manzala, and east of Suez Canal as well as communities living downstream. Temporary and permanent jobs will be created for the local communities. The consultations will be done quarterly during implementation as part of the ESIA and will be supervised by the E&S specialist of the PIU.

F. Bank Group Experience and Lessons Reflected in Design

22. The Bank has accumulated experience in the irrigation, water and sanitation sector in Egypt and across the continent. Besides, lessons learnt and experience of other development partners supporting the irrigation, water and sanitation sector in Egypt have also been taken into account in the project. These lessons show the need to include at least 2 years operation & maintenance period after completion of construction works. This will allow the contractors to operate the plant and to provide on the job training to the relevant staff of the executing agency. Other lessons taken into account are: (i) the need to address institutional issues while supporting infrastructure development, ii) the importance of having a Monitoring and Evaluation Unit specific to the project to provide analytical content in progress reports; (iii) need to streamline and avoid having numerous and time-consuming conditions precedent to effectiveness to avoid delayed effectiveness of projects, and (iv) the need for launching advance procurement to mitigate the long procurement process for such complex projects. These lessons have been incorporated.

3 PROJECT FEASIBILITY

A. Financial and Economic Analysis

23. Cost recovery: The project represents an expansion of the existing facilities, then, it will get benefit from the size, scale, technology, the sun-cost of the initial investment represented by Land, and initial infrastructures of GEAWWTP and finally the dropping in the operation cost due to the technology acquired and the saving of the electricity expenditures. The direct revenues of the project represent the wastewater, the sludge sold to private enterprise and farmers, and indirectly the savings in the energy needs of the complex, contributing positively to financial sustainability of the project. Additional revenues will cover the recurrent operation and maintenance cost and go beyond the national average to face the replacement and the debt service estimated at 64%. This will attenuate the gap between the operation cost and the revenues ratio and, progressively reduce the direct and indirect subsidies and subventions, provided by the government of Egypt to the sector and ensuring the financial sustainability of the project.

24. **Economic performance:** The economic analysis is conducted through the discounted cash flow method, by comparing the "with" and "without" project of the various costs and benefits that will accrue to the beneficiaries of improved and sustainable wastewater treatment system, (Detail assumptions are provided in Technical Annex 3). The cost includes investment, replacement, operation and maintenance costs (comprising of staff, energy, chemicals, repairs, and other overhead costs). The benefits correspond to the additional revenues from: i) house connections; ii) the farmer's additional revenues of 70,000 acres irrigated, yielding higher revenues, and contributing to food security; iii) the valorisation of sludge produced; iv) the work valorisation of force used during the implementation (most of

workers will be from the area of the project where underemployment is relatively high); and v) health, Productivity, and time value benefits.

25. All the costs and benefits considered are net of duties and taxes. The economic life of the project, estimated as 25 years with a salvage value at the end of the period. The project's economic rate of return amount 22.9 %, which is higher than the opportunity cost of capital of 10%. The net present value stand at 7291 million EGP. The EIRR and NPV would be much higher if it were possible to quantify different types of benefits and externalities i.e. the value of land and houses, impact on environment and climate change, improving the standard of living and the quality of life, social inclusion, education, reduction of absenteeism in the workplace and schools, employment generated, the involvement of private sector in water reuse projects and the impact on State revenues through additional taxes.

26. Sensitivity Analysis: Sensitivity analysis to test the robustness of the EIRR was carried out to determine the impact of adverse variations. Assuming that the investments and operation cost increases by 10%, the benefits decrease by 10% and a combined scenario of these 2 variations. The analysis shows that the project is economically viable and socially beneficial for Egypt. In the worst scenario, the EIRR and NPV still exceeding the opportunity cost of capital, changing to 17.9% and 4,492 million EGP. The following table summarize the sensitivity analysis:

Table 5: Key economic and financial figures (for cost benefit analysis)

FIRR (base case)	NA
EIRR (base case)	(22.9%)
NPV, (discount rate)	7,291 million EGP, (10%)

Additional Positive Effects

27. In addition to the quantifiable benefits, the project will boost state revenues through additional taxes and customs (i.e., construction contract, equipment, etc.), increase food production, improve the sanitary and hygiene conditions and living environment of urban and rural populations living within the vicinity of plant, improving soil conditions through the safe use of the treated sludge as organic fertilizer (Decree Number 254/2003⁶), strengthen the social cohesion and contribute to sustainability and climate resilience through the re-use of treated wastewater in agriculture (Code 501/2015⁷).

B. Environmental and Social Safeguards

Environmental

28. According to the Bank's Integrated Safeguards Policy (ISS), the project is classified as a Category 1 project on 20 May 2021 as nuisances, health, and safety hazards and risks during construction and decommissioning phases and cumulative and residual impacts (heavy metal loaded sludge) and especially nuisances on local communities during operation are deemed significant. The project is also classified as a Category C project (High E&S risk project) under Egypt's Guidelines of Principles and Procedures for EIA (2nd Edition – January 2009) developed by the Egyptian Environmental Affairs Agency). As such, a full environmental and social impact assessment (ESIA) meeting the requirements of AfDB's

⁶ Minister of Housing Decree for rules regulating the -re-use of Treated Sludge produced from wastewater treatment plants.

⁷ Egyptian Code for the re-use of the treated wastewater in Agriculture

ISS and Egyptian guidelines was prepared by the Borrower, cleared with the AfDB, and then approved by the Egyptian Environmental Affairs Agency. The ESIA included undertaking two public consultations in May – December 2018 and August - September 2020.

29. The full ESIA for phases A and B received the approval of the Egyptian Environmental Affairs Agency (Phase III-A approved on 03 February 2021 and Phase III-B obtained on 17 July 2019). A consolidated ESIA report for both phase A and B was endorsed by the Egyptian Environmental Affairs Agency (EEAA) and confirmed to not affect the approvals issued for both phases. The EEAA will be responsible for the oversight of the project to ensure its compliance with Egypt's Law 4/1994 on protecting the environment. Other government agencies, such as the local labour offices, will be responsible for ensuring the project's compliance with their mandates, such as occupational health and safety.

30. The ESIA for Phase III-A+B was disclosed on AfDB and the GEAWWTP webpage on 01 December 2021. Additionally, a hardcopy of the ESIA has been disclosed at CAPW's head office in Cairo, the project site and the office of the Egyptian Environmental Affairs Agency in Cairo, Egypt. An Environmental and Social Management Plan (ESMP) has been prepared to mitigate the identified environmental and social impacts of the project. The ESMP has been disclosed with an estimated cost for implementation of 3,648,500 EGP / 196,526 Euros. This cost is included in the project overall cost as agreed with CAPW. The anticipated direct negative impacts related to the construction and decommissioning works include dust generated during excavation and demolition works causing health impacts; noise generated from the use of heavy equipment; accidents caused from the use of various tools and equipment; soil contamination from the improper handling and storage of chemicals and waste. Negative impacts during the operation phase of the project include the emissions of foul odours to the surrounding residential areas; noise emissions from mechanical works; accidental leakages which may cause soil contamination; occupational accidents resulting from the maintenance and servicing of different equipment; exposure of workers to biological and chemical hazards due to the improper management of sludge treatment; and an impact on the hydraulic capacity of the Baqar drain system. The project will not affect negatively any sensitive or protected area as all works will be within the existing WWTP boundaries. It is to be noted that the existing WWTP includes an existing drying sludge area which has the capacity to take the additional sludge (446,790 kg/day) that will be produced by the project. In addition, in the interactions between the workers and social groups, possible gender-based violence may arise in course of the works or operation phases.

31. The project will be implemented entirely within the premises of the existing WWTP and will not entail any land acquisition neither involuntary resettlement or displacement of people and/or businesses. CAPW have provided supporting documentation to demonstrate this. The surrounding area of the site consists of irrigated, cultivated land with the desert beyond, as well as residential and commercial activities.

32. The GoE shall be the borrower of the AfDB, AGTF and AFD loans while CAPW will be the Executing Agency (EA) of the project. This institution is already familiar with Bank rules and procedures through the implementation of current Abu Rawash WWTP, and the Feasibility Study and Project Preparation of Green Abu Rawash Sludge Facility, and the previous phase of Gabal El Asfar project. The Bank also noted that the plant does not have adequate, on-going engagement nor sufficient corporate social responsibility initiatives with the neighbouring communities. In addition to the environmental and social safeguards

specialist will be appointed as a member of the PIU and seconded by the supervision engineer team. The executing agency confirmed that the organizational capacity for the project will constitute a Coordinating Committee, which consists of a high-ranking representative from the Construction Authority for Potable Water and Wastewater (CAPW), the supervision Engineer, and a high-ranking representative from EPC Contractor.

33. The executing agency also confirmed that an Environmental Management Unit (EMU) at Gabal Asfar WWTP will be established and supported by the supervision engineer team. This unit is authorized to perform the following during both construction and operation phases of the project to: (i) ensure proper implementation, operation and maintenance of all activities of the Project in conformance with the environmental and social covenants of the loans which include the ESMP, SEP, GRM Borrower's engagements, ISS requirements, nation laws, regulations and standards, and internationally recognized best practices; (ii) to develop models for implementing training programs on environmental and social matters to all WWTP staff and stakeholders; (iii) to implement all the necessary measures that would mitigate all environmental and social impacts mentioned in the ESMP, SEP and GRM; (iii) to use performance indicators and benchmarks; (iv) to prepare the "Environmental Register" and frequently complete it, in accordance with EEAA regulations and receive EEAA inspection missions in this regard.; (iv) prepare necessary reports related to the assessment of environmental conditions and data review, and to assess the impacts of the project requested by the donor or any pertained governmental authority; (v) prepare or coordinate the preparation of monthly E&S reports and E&S compliance Audit reports to submit to the Bank in a timely manner.

34. CAPW will be required to submit monthly E&S progress monitoring reports no later than 21 calendar days after the end of each month. CAPW will also be required to recruit an independent E&S specialist to prepare each year from the second year of implementation until completion of the project the annual E&S compliance Audit report to be submitted to the Bank no later than March 15th of the following year.

35. The project will develop and implement a Stakeholder Engagement Plan (SEP) as per the ESIA approved and disclosed for the project. The preparation of the SEP will be a condition and must be reviewed and approved by the bank prior to its disclosure. Although CAPW has experience in implementing projects financed by AfDB, their organizational capacity in terms of E&S requires strengthening to ensure the project is implemented in line with the prepared ESMP and the bank's ISS. However, CAPW is expected to be strongly supported by the supervision engineer and contractor responsible for constructing the project, and provisions have been made in the ESMP budget to strengthen their E&S capacity, including the recruitment of E&S specialists.

Involuntary Resettlement

36. No resettlement is expected from the project. The GEAWWTP is established on government land. Construction of GEAWWTP has been done in stages and phases. The plant still has area reserved for the remaining planned expansion works. This land is already fenced off and is not available or accessible to the public.

Climate Change and Green Growth

37. The project's site encompasses the existing GEAWWTP site (Stage I & II) and its surrounding area, and the project extension area for Stage III & IV. The Project area is not exposed to climate change risk. Most of the project area has desert climate conditions, thus

no flood is expected including from the Nile River. The project has also a positive impact in terms of adaptation as the reuse of treated wastewater will improve the availability of water resources for different uses. Thus, the project is rated category 3, according to the Climate Screening System (CSS), with a score of 29 reflecting a very low vulnerability to climate risks. On the other hand, the Project will contribute positively to climate change mitigation by generating electricity from biogas generated by a sludge treatment facility financed under component 1.

C. Other Cross-cutting Priorities

Poverty reduction, Inclusiveness and Job Creation

38. The project will be highly beneficial to Egyptians at large from different perspectives. In terms of health, the plant will increase the treated wastewater capacity by 1 million m³/day, which will reduce water-borne diseases, such as typhoid fever, dysentery, salmonellosis, and others, constituting a health hazard attributed to poor hygiene practice. Treated wastewater will result in decreased infant mortality rates and decrease in absenteeism of children from school. The plant will also decrease the water pollution reaching the agriculture drainage system, thereby improving the quality of water recycling for agriculture, as well as the environment for the fish, fauna, and flora of the Lake Manzala. In terms of irrigation, the treated water may be used to promote specific types of agriculture produced thereby addressing challenges related to water scarcity particularly in arable areas such as Sinai. In terms of economic livelihoods and job creation, the plant will create 3200 direct jobs by the contractors during construction phase and 300 jobs during operation phases. It is estimated that around 4000 indirect jobs will be created in SMEs operating in agribusiness and fisheries as well as through revitalization of the local economy and the increased sales of construction material and equipment particularly during construction phase. It will also induce financial savings for the families that result from the difference between the cost of wastewater treatment and the cost from the informal cleansing of the pits conducted regularly (almost monthly). In terms of agriculture, the organic fertilizer produced as output of the sludge facility, will contribute to improve the quality of the farmed crops whilst also generating additional income to the government to be used to pay back the loans.

39. The GWWTP is also beneficial to the neighbouring community. Efforts have been exerted on awareness raising and sensitization related to hygiene practices. The plant has also engaged with the city council, on behalf of the community, to ensure frequent garbage removal process and to install sanitation services in local schools. In addition, the plant ensures weekly spraying of the neighbourhood against mosquitoes and flies and cultivates aromatic plants in its experimental farm to reduce the bad smells that sometimes occur. The plant should consider engaging further with the community and other stakeholders on waste management initiatives and involve the youth. It should also play a bigger role in corporate social responsibility.

Opportunities for Building Resilience

40. With a population growth rate of about 2% per year, Egypt must find solutions to ensure better management of its water supply, among other things. Untreated agricultural wastewater usually ends up in water bodies, causing water quality degradation. Toxic substances in wastewater can also have serious consequences on aquatic animals, which in turn transmit diseases to humans. In this context, the Egyptian government has made water and wastewater management a major component of its development. Indeed, more than 80%

of Egypt's water supply depends on the Nile, and the country is facing a major challenge to provide the population with drinking water. The agricultural sector, which employs 30% of the workforce and contributes 14% of the country's GDP, consumes 85% of the annual water supply provided by the Nile. Water reuse is therefore of particular importance to Egypt. The country has one of the lowest annual waters share per capita in the world. Egypt's per capita share of water is currently below the international standard of 1000 m³/year, with the country taking 600 m³/year, hence the importance of dual-treatment wastewater reuse.

41. The project design takes in consideration the environment, socioeconomic drivers, development of agricultural land, water security that could be identified as a positive entry points to build resilience. The project has the potential to provide an alternative source of water supply, other than the Nile, to farmers through the reuse of treated wastewater, especially in agriculture. Moreover, the subsequent additional resources coming from the agricultural development and job creation as a result of this project could significantly contribute to economic development and social progress, also reducing the water contamination and improving water quality would enhance fish farming and aquaculture environment.

Gender Equality and Women's Empowerment Promotion

42. The project falls under category 3 of the Gender Marker System given that it does not have an outcome with regards to achievement of gender equality or women empowerment but still has some activities towards addressing the reduction of gender inequality. The 2022 Global Gender Gap Index ranks Egypt at 129 out of 146 countries worldwide. Whilst the report acknowledges significant improvement in political empowerment for women, a lower score with significant decrease in women's labour force participation (15,39% vs 67,9% in 2022 compared to 24,7% vs 77% in 2020) and in access to economic opportunities has been witnessed over the last two years. According to the same report, the attendance of women in the areas of sciences and technology is highlighted as very low with a ratio of 36,9% vs 63,10% in STEM Graduates and 20,93% vs 79,07% in Engineering, Manufacturing and Construction areas. This situation is mirrored in the project areas. Socio-cultural dynamics and lack of required skills limit women's participation and hence reduces access to equal opportunities. While the project will benefit all households serviced by El Gabel El Asfar irrespective of their income or if the household has a male or female head, specific gender impact is anticipated in the Abu Rawash Village where the plant is situated and along the Barakat Drain where the treated wastewater is discharged. Three major issues have been identified: (i) limited women's participation, (ii) environmental hazard impact on women, and (iii) limited access to income for improving their living conditions. The project's interventions address these issues through: (i) Gender-sensitive public health awareness for communities residing in the surroundings of the plants and along the drains. (ii) Effective participation of women at countryside areas in water and sanitation committees by increasing public awareness on the importance of women's involvement and gender-related issues. (iii) Encouraging women from the local community to work during construction and operation.

4 IMPLEMENTATION

A. Institutional and Implementation Arrangements

43. The Project shall be implemented using existing institutional arrangements incorporating lessons and experience gained from similar operations. The project will be implemented over four years. The GoE is the borrower of the ADB and AGTF loans while

CAPW, under the Ministry of Housing, Utilities and Urban Communities (MHUUC), will be the Executing Agency (EA). The project will be implemented using existing structures of CAPW and considering lessons learnt from similar operations, particularly Gabal El Asfar Wastewater treatment project. CAPW has the experience in the implementation of similar projects having implemented the earlier phases of the same plant as well as other sewerage projects. The EA (CAPW) has constituted within its Construction Department, a Project Implementation Team (PIT), comprising a Project Coordinator, 3 Engineers (Electrical, Mechanical and 1 Civil), one of whom will be experienced in procurement/contracts management and another with expertise in M&E), Environmental & Social Specialist, and Financial Management Officer. The PIT will be directly in charge of the project implementation. The PIT will be assisted by an experienced engineering supervision services consultancy firm, whereas the environment specialist and the social and gender specialists shall be supporting the project's PIT when recruited through the project's supervisor engineer's teams. Recruitment of the consultancy firm is to be launched and is to be finalized before 30 June 2023. The CAPW shall be responsible for overall coordination of the project and reporting obligations to the Bank.

44. In addition, and in line with GoE's current practice of ensuring effective project coordination across ministries, a Project Steering Committee (PSC) shall be established comprising various relevant stakeholders, including HCWW, Ministry of Environment, Ministry of Finance, the Ministry of International Cooperation (MoIC), Ministry of Health, Ministry of Social Solidarity, Ministry of Environment, Qaliobia Governorate, to be chaired by the MHUUC to oversee the implementation of the project. The PSC will be responsible for the strategic direction and coordination of the Project. See Annex 4-4 for implementation details.

B. Procurement

45. Procurement of the wastewater treatment expansion works co-financed by the Bank & AFD will be conducted in accordance with the Bank's Procurement Policy Framework, dated October 2015 and following provisions stipulated in the financing agreement. The Construction Authority for Potable Water and Wastewater (CAPW) acting as EA for this project have been implementing and coordinating the execution of several donors & Banks' projects and grants. The Bank's evaluation of Egypt's procurement system revealed that new law (law 182 of 2018) has introduced several modernization and standardization features in line with international standards of best practice while calling for a comprehensive capacity-building effort of procurement operatives aiming at professionalization of the procurement function in Egypt. Other additional legal texts such as decrees and legal opinions from the state council are regularly issued to complement this framework. It covers procurement of goods, works and consultancy services as well as leasing, sale, and rental of real estate. It is enforceable to all states' administrative body units, Ministries, departments, bodies having special budgets, local administration units, and public's authorities. However, the new Procurement Law of Egypt and its Executive Regulations is in a state of transition pending the completion of the development of essential implementation instruments like the Standard Bidding Documents, the Procurement Manual, and its prescribed standard toolkits.

46. The Bank has updated the assessment of the capacity of the Procurement Department under CAPW: The assessment has covered the structure of the Procurement Department and its capacity to discharge the procurement responsibility under this loan. It concluded that although CAPW have different capacities and experience in conducting both national and

international procurement procedures, all of them have trained staff in national procurement rules, experience in applying international procurement practice. To support the project implementation team (PIT) to discharge the procurement function, the Procurement Department will assign a specialist in procurement and contract management to be seconded, if necessary, by different qualified staffs who have required capacity to manage all the affairs of procurement aspects of the project using Bank rules and procedures for goods, works & consultancy services.

47. The General Procurement Notice has been published on the Bank website & UNDB online. The Executing Agency also prepared a procurement plan covering 18 months from project life and the plan was cleared by the Bank and published accordingly in the Bank external website followed by approval of prequalification documents for advance contracting⁸ and advertisement of specific procurement notice (SPN) for works contract in the Bank website, DG Markets and UNDB, accordingly.

48. The procurement of works for the expansion of GEAWWTP, Stage III Phases A& B (UA 242.23 million), will be carried out under the International Competitive Bidding (ICB) procedures. These sewage treatment works which are complex and huge in magnitude will be let as a Design, Supply, Install, and Operate contract. The contract will be subject to a two-envelope system bidding method, considering both technical and financial proposals. The component shall be financed jointly by AFD and ADB using of ADB procurement rules and procedures.

49. The procurement of services: a) Consultancy service (firm) for the Supervision Engineer to be financed by AFD/EU/AFDB/GoE, using QCBS method. The main financer of the consultancy is AFD (and a possible contribution from the EU) for foreign currency and GoE for local currency; b) services shall be financed by MIC TAF Grant (Euros 0.30 million) and include recruitment of recognized consulting firms/Individuals to carry out: i) GEWWTP E&S compliance audit; ii) financial audit; iii) inductions training on procurement for CAPW staffs; and consultant to conduct training on E&S.

50. Procurement Risks and Capacity Assessment (PRCA): The assessment of procurement risks at the Country, Sector, and Project levels and of procurement capacity at the Executing Agency (EA), were undertaken for the project and the output have informed the decisions on the procurement regime being used for the specific transactions under the project. The appropriate risks mitigation measures have been included in the procurement PRCA action plan proposed in Annex 4-5

C. Financial Management, Disbursement, and Audit

51. The financial management (FM) of the project will be based on the existing systems of CAPW. These systems were assessed in accordance with the Bank FM policies and procedures and covered each FM component adequately: budgeting, accounting, internal control, treasury management, financial reporting, and external auditing. In assessing the FM capacity, the team used the country fiduciary risk assessment (CFRA) conducted in 2021

⁸ The Government was fully aware that: i) it undertakes such Advance Contracting at its own risk and does not commit the Bank in any way to approve the Financing of the Project; ii) Procurement under Advance Contracting must have been carried out according to the Bank's Procurement Framework, if it is to be eligible for Bank Financing; and iii) Announcements must indicate that the Borrower has applied for Financing from the Bank, and that iv) if the contract is signed prior to the signature of the Financing Agreement, reimbursement by the Bank of any payments made by the Borrower under the contract is referred to as Retroactive Financing and only permitted within the limits specified in the Financing Agreement

and the financial management performance of Bank-financed projects executed by CAPW, namely Gabal Al-Asfar Project (loan of 53 M€), Helwan Study Project (grant of 0.6 MUA) and Abu Rawash WWTP (Loan 150 million USD). The assessment concluded that the current applicable FM systems are well developed and capable of managing the project resources with an overall moderate risk level. Some mitigating measures are required to enable these systems to meet the Bank requirements on project reporting and auditing.

52. CAPW has experience with similar projects financed by the Bank and adequate budgeting and treasury processes including the newly introduced electronic payment system. As a public service authority, its internal control environment imposes clear segregation of duties, prior authorization of commitments and ex-ante controls of payments. However, there is no internal audit function based on internationally accepted audit standards and risk-based approach and the cash-based accounting system in place is largely manual and will need some improvements to provide the project with the adequate and timely financial information. Therefore, CAPW will appoint, as part of the project implementation team, a financial management officer with adequate qualifications and previous experience with donor funded projects acceptable to the Bank to handle the day-to-day financial activities of the Project and ensure timely recording of all project transactions and adequate filing of project documents. CAPW will provide to the Bank, on 1st of August of each year, the necessary evidence (through the corresponding budgetary allocations) on the availability of the counterpart funds needed to carry out the project. Using an integrated financial management system, allowing automated compilation of project financial statements and reports, CAPW will submit quarterly financial reports for the project and annual financial statements duly audited by an external auditor covering the entire project components and sources of funds.

53. **Audit:** The executing agency (CAPW) financial statements are audited by the Accountability State Authority (ASA, formerly CAO), which is the Egyptian Supreme Audit Institution. The audits are technically conducted in compliance with INTOSAI standards and are prepared within six months of the end of the fiscal year. However, the ASA reports are treated as confidential according to the current legislation in Egypt and cannot be communicated to the Bank. Therefore, an independent private auditor acceptable to the Bank will be recruited to audit the project annual financial statements in compliance with the Bank standard TOR for audit of investment operations. The audit fees will be paid on the Bank's resources, once the audit reports are accepted by the Bank. The external auditor report shall include all project's components and activities, cover all sources of funds (the Bank, co-financiers funding and CAPW own resources) and be submitted to the Bank no later than six months after the end of each reporting period (30 of June).

54. **Disbursement Arrangements:** Disbursement of the Bank (ADB) and AGTF loans will be made using the Direct Payment Method of disbursement, in accordance with Bank rules and procedures as laid out in the Disbursement handbook. The Bank will issue disbursement letters, which provide specific guidelines on key disbursement procedures and practices. See annex 4-7 for detailed audit arrangement.

D. Monitoring and Evaluation

55. M&E of the project will be carried out as a regular management function by the Project Steering Committee (PSC) and the PIT based on the baseline data and indicators defined in the result based logical framework. The M&E Expert who is also a member of the PIT will

be fully responsible for collecting and analysing data for reporting. In addition, Bank supervision missions will be undertaken twice per year and the Bank will undertake desk supervision quarterly, providing feedback and following up on progress reports. A mid-term review will be undertaken during the second year of implementation. The PIT/CAPW will prepare quarterly Progress Reports, annual technical and financial audits, monthly E&S monitoring reports and annual E&S Audit reports. Upon completion, CAPW will prepare and submit to the Bank a project completion report (PCR).

E. Governance

56. The 2014 Presidential elections paved the way for Egypt's restored stability following three years of difficult political transition. The new constitution was ratified in January 2014 and presidential elections were organized in May 2014 paving the way for Egypt's economic rebound and stability. The electoral constituencies' law was approved in December 2014 and constituted the final legal step before the next parliamentary elections. The forthcoming elections will represent the final milestone of the political roadmap set forth in July 2013. Meanwhile, the GoE has been deploying efforts to restore security and implement critical policy reforms to further consolidate economic and political stability. At sector level, water sector governance has been evolving through sector reforms aimed at streamlining and strengthening sector institutions, with separation of roles and responsibilities for policy setting, regulation, and service provision. The Bank in collaboration with development partners will remain engaged to support government to deepen and consolidate sector reforms.

57. As regards procurement within the project, CAPW has internally inbuilt checks and balances to ensure transparency and fight corruption. Procurement is carried out by an independent Committee of 12 people, comprising staff of the Authority and from other Government organizations and ministries including Ministry of Finance. The Committee undertakes its evaluation according to set rules and procedures and submits its recommendations to the Chairperson of CAPW for approval. The Chairperson approves contract awards on behalf of the Minister of MHUUC. For the proposed project, a reputable engineering consultancy firm will assist with supervision of construction works. In addition, provision has been made under the project for an annual audit to be carried out covering all aspects of project implementation. In addition, the PIT will include an expert with adequate experience in procurement and contract management.

F. Sustainability

58. To ensure technical sustainability, the project includes a requirement for the consortium of contractor to operate and maintain the plant for one year following construction. Both the consultant and the consortium of contractors will be mandated to train additional counterpart staff of the executing agency and the operator, on all aspects of the project's O&M to promote technology transfer. In addition, the proposed project is like other treatment plants managed by the executing agency. In order to ensure financial and economic long-term sustainability of the sector, the water and wastewater policy is targeting continued progress towards cost recovery in service provision through user charges. Currently it is estimated that the recurrent cost of the additional finance (operation and maintenance) will be approximately EGP 60 million per year. For the existing facilities, the costs are met through Government subsidies. The recently approved tariff adjustment (effective May 2022) shows GoE's commitment to set the sector on solid foundation of cost recovery. In

this regard, GoE is committed to implementing a program of tariff adjustments for WSS services in order to ensure sustainability of service provision including investment. These adjustments will also take into account the social nature of services and the needs of the poor through the application of classified tariff. The government plans to reach O&M cost recovery in the short term (up to two years), O&M cost plus replacement (medium term) and full cost recovery as its long-term plans. In this regard, the government continues to demonstrate its commitment by issuing required decrees, as done recently with Prime Minister's decree number 1730 of 2017 to ensure financial sustainability of water and wastewater service delivery and reduce dependency of sector institutions on Government subsidy.

59. One of the challenges of the water sector in Egypt is the need to protect and enhance the quality of water in its river, canals, and drainage systems. These water bodies receive heavy load of municipal waste deteriorating the water quality and endangering public health. The GoE has in the past two decades invested more than 60 billion EGP on water and sanitation and is currently updating its NWRP 2017-37⁹, with an investment plan of requiring more than EGP 885 billion. The NWSP has identified measures for improving water quality in the water bodies that includes increasing and enhancing the municipal wastewater treatment plants to curtail pollution of water bodies. The proposed project is part of GoE long term plans and is a manifestation of the government's commitment to the development of the sector.

60. For the sustainability of the wastewater treatment plants, is important for the GoE to ensure the availability of a pool of solid, well-qualified, competent, and highly skilled staff, consultants, and technicians. Within that framework, the Bank recommends that CAPW establishes an internship program, piloted at Abu Rawash WWTP, to provide on-the-job experience to recent graduates/graduating seniors from technical institutes and universities that focus on wastewater treatment. Abu Rawash plant may include at least 10 internship opportunities per year, for the duration of the project.

G. Risk Management

61. The country's political and governance context risk, is low as the executing agency CAOW is not linked to political beliefs. The microeconomic risk of currency fluctuation is medium as the project budget are carefully analysed separating cost in local currency and foreign currency to mitigate any fluctuation changes. There is a technical risk with high impact and medium probability that relates to the CAPW's capacity to operate a large wastewater infrastructure project. This risk will be mitigated by contracting the operation and maintenance of the plant during the first two years to the construction firm. After this period, there are two potential options, first, the O&M will be handed over to the CAPW (and on-job training will have been provided during these twenty-four months by the contractor) or, second, and what is more traditionally applicable probable, whereas the wastewater service for the extension will be offered for international competition. The risk matrix is presented in Annex 4-2 of this PAR.

H. Knowledge Building

62. The knowledge gained through the implementation of several projects and studies in the sector in Egypt has been duly applied in designing this project. In the same pattern, the

⁹ National Water Resources Plan, 2017-2037, Ministry of Water Resources and Irrigation.

knowledge that will be generated by this Project will be instrumental in designing and managing similar projects in the sector in the future. The results from the proposed studies and other surveys, including the socio-economic impact study will inform the stakeholders on how to put the acquired knowledge attributes into practical use for better results-oriented achievements and sustained benefit flows.

63. With the current trend of population growth in major cities in Africa, many institutions have a need to explore means of sufficiently managing wastewater in their countries. Management of wastewater has direct impact on the quality of the environment and especially on water resources. The project is therefore expected to generate considerable interest and knowledge, on how to resolve problems associated with management of large volumes of wastewater. The lessons from the design, construction, and management of projects of such magnitude will be useful to many other countries in the region. The lessons learnt and experience gained will be documented for dissemination in workshops, discussions, and seminars. Even during construction, the Bank will encourage groups from regional countries to visit the plant for learning purposes and knowledge dissemination. Bank supervision missions, quarterly and annual progress reports, mid-term review, monthly E&S monitoring reports, E&S and financial audit and completion reports will provide an opportunity to capture knowledge on relevant aspects of the project. This will include its design, implementation modalities, procurement, as well as operations and management, which will be available for analysis and will be shared both within the Bank and with other development partners as well as authorities in RMCs.

5 LEGAL INSTRUMENTS AND AUTHORITY

A. Legal Instrument

64. The Project will be financed by an ADB and AGTF loans. The legal instruments for the Project are (i) a Loan Agreement between the African Development Bank (the “Bank”) and the Arab Republic of Egypt (the “Borrower”); (ii) a Loan Agreement between the Bank (as administrator of the Africa Growing Together Fund) and the Borrower (together the “Loan Agreements”).

B. Conditions Associated with Bank’s Intervention

65. Conditions Precedent to Entry into Force of the Loan Agreements: The entry into force of the Loan Agreements shall be subject to the fulfilment by the Borrower of the provisions of Section 12.01 of the General Conditions Applicable to Loans and Guarantee Agreements of the ADB (Sovereign Entities).

66. Conditions Precedent to First Disbursement of the Loans: The obligation of the Bank to make the first disbursement of the loans shall subject to the entry into force of Loan Agreements in accordance with section 65 (*Entry into Force*).

67. **Other Conditions/Undertakings:** The Borrower, through the Executing Agency, undertakes to:

- a. Implement the Project in accordance with applicable national legislation, the Bank’s safeguards policies and the Environmental and Social Impact Assessment (ESIA), and report to the Bank monthly in a form acceptable to the Bank on the implementation of the ESIA.
- b. submit to the Bank, within seven (9) months of the signature of the Loan Agreement, the evidence of the approval of the AFD Co-financing in form and manner acceptable to the Bank or submit the evidence that the Borrower has secured financing from

alternative sources to cover the financing gap resulting from failure to obtain the AFD Co-financing

- c. Recruit an experienced engineering supervision services consultancy firm for the project implementation, within six (6) months of the first disbursement of the Loan.
- d. Make available the amount of Euros 235 million, two hundred and thirty-five million Euros as its counterpart contribution (the “Counterpart Contribution”) towards the costs of the Project.
- e. Prepare and submit to the Bank an operation manual for the different Project activities within six (6) months of the entry into force of the Loan Agreement.

C. Compliance with Bank Policies

This Project complies with all applicable Bank policies.

6 RECOMMENDATION

68. Management recommends that the Board of Directors approve the proposed *ADB Loan* of Euro 80 million and *AGTF loan* of Euro 30 million to the Arab Republic of Egypt for the purposes and subject to the conditions stipulated in this report.

7 RESULTS FRAMEWORK

RESULTS FRAMEWORK					
A PROJECT INFORMATION					
PROJECT NAME AND SAP CODE: Water Recycling for Agriculture – Gabel El Asfar Wastewater Treatment Plant – Stage III – Phases A+B (GEAWWTP) - SAP-ID: P-EG-AAC-027				COUNTRY/REGION : EGYPT/RDGN	
PROJECT DEVELOPMENT OBJECTIVE: To improve environmental sustainability, agricultural production, and resilience and, therefore, the quality of life of the Egyptian population through the re-use of treated wastewater in agriculture.					
ALIGNMENT INDICATOR(S): GDP Agriculture Growth Rate, GDP Health Expenditure, Incidents of water and sanitation related diseases.					
B RESULTS MATRIX					
RESULTS CHAIN AND INDICATOR DESCRIPTION	RMF or ADOA INDICATOR OR	UNIT OF MEASUREMENT	BASELINE	TARGET AT COMPLETION	MEANS OF VERIFICATION
OUTCOME 1: Increased arable lands					
INDICATOR 1: Arable lands using recycled water for irrigation from Bahr El-Baqar Drain	<input type="checkbox"/>	Acres	0 (2022)	- 000 ¹⁰ 70,	National statistics
OUTCOME 2: Increased access to safely managed sanitation services					
INDICATOR 2: Population accessing safely managed sanitation services in Eastern Cairo	<input type="checkbox"/>	Million	12.5 million (2022)	17.5 million	GEA Annual Reports & Plant Operation Reports
OUTCOME 3: Increased Compliance of the Quality of wastewater effluent released from the WWTP meets national standard ¹¹					
INDICATOR 3.1: SS of effluent reduced maximum value incident/[Average]	<input type="checkbox"/>	Mg/l	224/ [120]	<20	Plant Operation Report & Environmental Agency Report
INDICATOR 3.2: Biological Oxygen Demand (BOD ₅) of effluent reduced maximum value incident/[Average]	<input type="checkbox"/>	Mg/l	370/ [100]	<20	Plant Operation Report & Environmental Agency Report
OUTCOME 4: Job creation					
INDICATOR 4: Number of temporary/permanent jobs directly created through the project (at least 10% for women Temporary and 10% Permanent)	<input type="checkbox"/>	number	0	Temporary: 3200 Permanent: 300	GEA reports
OUTCOME 5: Sustainable Operation and Maintenance					
INDICATOR 5.1: Green Energy produced by the plant extension (recycled) – (Cut of the operation and maintenance cost by 70%)	<input type="checkbox"/>	MWh/month	0	4000	GEA Annual reports
INDICATOR 5.2: Annual GHG emissions reductions	<input type="checkbox"/>	tCO ₂ /year	0	24,050 ¹²	Annual report
OUTPUT 1: Expand WWTP Capacity					
INDICATOR 1.1: Plant treatment Facility (Primary and Secondary) –	<input type="checkbox"/>	number	0	1	GEA Annual reports

¹⁰ Calculated for this stage (1,000,000 m³/day) – water crop use is 6000 m³/year

¹¹ There are five quality indicators which the plant shall meet following upgrading: Biological Oxygen Demand (BOD₅) < 20mg/l; Total Suspended Solids (TSS) < 20 mg/l; Chemical Oxygen Demand < 80mg/l; Fat, Oil, Grease (FOG) < 5mg/l; Fecal Coliforms <1000 No./100ml. Baseline data obtained from planning inception report (inlet design loads valid up to the year 2020)

¹² Only considering avoided emissions thanks to energy production on site with biogas. Grid emission factor for Egypt of 0.501 tCO₂e/MWh (according to the Bank's tool). Estimate will be refined at supervision stage.

Phase A 500,000 m ³ /day are satisfactory performing					
INDICATOR 1.2: Plant treatment Facility (Primary and Secondary) – Phase B 500,000 m ³ /day are satisfactory performing	<input type="checkbox"/>	number	0	1	GEA Annual reports
INDICATOR 1.3: Sludge Facility exist and ready for supplying Gas for Generators	<input type="checkbox"/>	number	0	1	GEA Annual reports
INDICATOR 1.4: Biofuel Gas Generators are generating electricity from the biogas.	<input type="checkbox"/>	number	0	1	GEA Annual reports
OUTPUT 2: Provision of institutional and technical support					
INDICATOR 2.1: Number of persons trained	<input type="checkbox"/>	number	0 [2022]	200 (20 for women), 20 % young graduates (2027)	QPR and GEA Annual reports
OUTPUT 3: Project Management					
INDICATOR 3.1: PIU in place	<input type="checkbox"/>	Binary	0 [2022]	1 (2027)	QPR and Annual report
INDICATOR 3.2: Number of issued and accepted financial audit reports	<input type="checkbox"/>	Number	0 [2022]	4 (2027)	QPR and Annual report
INDICATOR 3.3: Number of issued and accepted E&S audit reports	<input type="checkbox"/>	Number	0 (2022)	4 (2027)	QPR and Annual report

8 ENVIRONMENTAL AND SOCIAL COMPLIANCE NOTE (ESCON)

ENVIRONMENTAL AND SOCIAL COMPLIANCE NOTE (ESCON)

AFRICAN DEVELOPMENT BANK GROUP

A. Basic Information¹³

Project Title: WATER RECYCLING FOR AGRICULTURE - GABAL EL ASFAR WASTEWATER TREATMENT PLANT - STAGE III - PHASES A & B		Project SAP code: P-EG-AAC-027
Country: Egypt	Lending Instrument¹⁴: DI <input checked="" type="checkbox"/> FI <input type="checkbox"/> CL <input type="checkbox"/> BS <input type="checkbox"/> GU <input type="checkbox"/> RPA <input type="checkbox"/> EF <input type="checkbox"/> RBF <input type="checkbox"/>	
Project Sector: Water & Sanitation		Task Team Leader: Yasser Elwan
Appraisal date: 31 JANUARY TO 10 FEBRUARY 2022		Estimated Approval Date: 13/7/2022
Environmental Safeguards Officer: Ousmane Fall		
Social Safeguards Officer: LAKPO, Kossi Doumégno		
Environmental and Social Category: 1	Categorization date: 30 /9/21	Operation type: SO <input checked="" type="checkbox"/> NSO <input type="checkbox"/> PBO <input type="checkbox"/>
Is this project processed under rapid responses to crises and emergencies?		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is this project processed under a waiver to the Integrated Safeguards System?		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

B. Disclosure and Compliance Monitoring

B.1 Mandatory disclosure

Environmental Assessment/Audit/System/Others (specify): Environmental and Social Impact Assessment (ESIA)	
Was/Were the document (s) disclosed <i>prior to appraisal</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/>
Date of "in-country" disclosure by the borrower/client	01 December 2021
Date of receipt, by the Bank, of the authorization to disclose	01 December 2021
Date of disclosure by the Bank	01 December 2021
Resettlement Action Plan/Framework/Others (specify): Not applicable.	
Was/Were the document (s) disclosed <i>prior to appraisal</i> ?	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Date of "in-country" disclosure by the borrower/client	[Date]
Date of receipt, by the Bank, of the authorization to disclose	[Date]
Date of disclosure by the Bank	[Date]
Vulnerable Peoples Plan/Framework/Others (specify): Not applicable.	
Was the document disclosed <i>prior to appraisal</i> ?	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Date of "in-country" disclosure by the borrower/client	[Date]
Date of receipt, by the Bank, of the authorization to disclose	[Date]
Date of disclosure by the Bank	[Date]
If in-country disclosure of any of the above documents is not expected, as per the country's legislation, please explain why: NA.	



B.2. Compliance monitoring indicators

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Have costs related to environmental and social measures, including for the running of the grievance redress mechanism, been included in the project cost?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Is the total amount for the full implementation for the Resettlement of affected people, as integrated in the project costs, effectively mobilized, and secured?	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>

C. Clearance

Is the project compliant to the Bank's environmental and social safeguards requirements, and to be submitted to the Board?

Yes ☒ No ☐

Prepared by:	Name	Signature	Date
Environmental Safeguards Officer:	Ousmane FALL		06/5/22
Social Safeguards Officer:	Kossi Doumegno LAKPO		06/5/22
Task Team Leader:	Yasser ELWAN		8/5/22
Submitted by:			
Sector Director:	M. FREGENE		09/05/2022
Cleared by:			
Director SNSC:	Maman-Sani ISSA		17/05/2022

¹³ Note: This ESCON shall be appended to project appraisal reports/documents before Senior Management and/or Board approvals.

¹⁴ DI=Direct Investment; FI=Financial Intermediary; CL=Corporate Loan; BS=Budget Support; GU=Guarantee; RPA=Risk Purchase Agreement; EF=Equity Financing; RBF=Results Based Financing.

NOTE DE CONFORMITÉ ENVIRONNEMENTALE ET SOCIALE (NOCES)

GRUPE DE LA BANQUE AFRICAINE DE DEVELOPPEMENT



D. Information de base¹⁵	
Nom du Projet : RECYCLAGE DE L'EAU POUR L'AGRICULTURE - STATION D'ÉPURATION DE GABAL EL ASFAR - ÉTAPE III - PHASES A & B	"Code SAP" du projet : P-EG-AAC-027
Pays : Egypte	Instrument de financement ¹⁶ : ID <input checked="" type="checkbox"/> IF <input type="checkbox"/> AB <input type="checkbox"/> PE <input type="checkbox"/> GU <input type="checkbox"/> APR <input type="checkbox"/> PP <input type="checkbox"/> FAR <input type="checkbox"/>
Secteur Responsable du Projet : Eau & Assainissement	Chargé du Projet : Yasser Elwan
Date de la mission d'évaluation ex-ante : 16-28 avril 2022	Date prévue de présentation pour Approbation : 13/7/2022
Spécialiste en sauvegarde environnementale : Ousmane FALL	
Spécialiste en sauvegarde sociale : LAKPO, Kossi Doumegno	
Catégorie environnementale et sociale : 1	Date : 30/9/2021
Type d'opération : OS <input checked="" type="checkbox"/> ONS <input type="checkbox"/> OBP <input type="checkbox"/>	
Ce projet est-il préparé dans un contexte de réponse d'urgence à une crise ou catastrophe ?	Oui <input type="checkbox"/> Non <input checked="" type="checkbox"/>
Ce projet est-il préparé sous dérogation de l'application du Système de Sauvegarde Intégré ?	Oui <input type="checkbox"/> Non <input checked="" type="checkbox"/>

E. Publication et Suivi de la Conformité	
B.1. Publication obligatoire	
Evaluation Environnementale et Sociale/Audit/Système/Autres (spécifier) : Etude des impacts environnementaux et sociaux	
Le (s) document (s) a-t-il / ont-ils été publié (s) avant l'évaluation ex-ante ?	Oui <input type="checkbox"/> Non <input checked="" type="checkbox"/> NA <input type="checkbox"/>
Date de publication dans le pays, par l'emprunteur/client	01 Decembre 2021
Date de réception, par la Banque, de l'autorisation de publier	01 Decembre 2021
Date de publication par la Banque	01 Decembre 2021
Cadre de Politique/Plan d'Action de Réinstallation/Autres (spécifier : Non applicable).	
Le (s) document (s) a-t-il / ont-ils été publié (s) avant l'évaluation ex-ante ?	Oui <input type="checkbox"/> Non <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Date de publication dans le pays, par l'emprunteur/client	[Date]
Date de réception, par la Banque, de l'autorisation de publier	[Date]
Date de publication par la Banque	[Date]
Cadre de Gestion/Plan d'Action pour les Groupes Vulnérables/Autres (spécifier : Non applicable).	
Le (s) document (s) a-t-il / ont-ils été publié (s) avant l'évaluation ex-ante ?	Oui <input type="checkbox"/> Non <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Date de publication dans le pays, par l'emprunteur/client	[Date]
Date de réception, par la Banque, de l'autorisation de publier	[Date]
Date de publication par la Banque	[Date]
Si la publication dans le pays, de n'importe lequel des documents cités ci-dessus, n'est pas possible, bien vouloir fournir les raisons légales : NA.	

B.2. Indicateurs de suivi de la Conformité	
Est-ce qu'un budget et un calendrier appropriés, ainsi que des responsabilités institutionnelles claires, ont été préparés pour la mise en œuvre des mesures environnementales et sociales ?	Oui <input checked="" type="checkbox"/> Non <input type="checkbox"/> NA <input type="checkbox"/>
Est-ce que les coûts liés aux mesures environnementales et sociales, y compris le mécanisme de gestion des plaintes ont été intégrés au coût total du projet ?	Oui <input checked="" type="checkbox"/> Non <input type="checkbox"/> NA <input type="checkbox"/>
Le montant total pour la réinstallation des personnes affectées, tel qu'intégré dans le coût total du projet, est-il entièrement mobilisé et disponible ?	Oui <input type="checkbox"/> Non <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Est-ce que le système de suivi-évaluation du projet inclue le suivi des impacts et mesures de sauvegarde environnementale et sociale ?	Oui <input checked="" type="checkbox"/> Non <input type="checkbox"/> NA <input type="checkbox"/>
Est-ce que les arrangements institutionnels adéquats ont été convenus avec l'emprunteur/client, puis intégrés correctement dans les accords juridiques du projet ?	Oui <input checked="" type="checkbox"/> Non <input type="checkbox"/> NA <input type="checkbox"/>

F. Approbation			
Le projet est-il en conformité avec les exigences de sauvegarde environnementale et sociale de la Banque, et peut donc être soumis à l'approbation du Conseil d'Administration ?			
Oui <input checked="" type="checkbox"/> Non <input type="checkbox"/>			
Préparée par :	Nom	Signature	Date
Spécialiste en Sauvegarde Environnementale :	Ousmane FALL		06/5/22
Spécialiste en Sauvegarde Sociale :	Kossi Doumegno LAKPO		06/5/22
Chargé du Projet :	Yasser ELWAN		08/5/22
Soumise par :			
Directeur sectoriel :	Martin FREGENE		09/05/2022
Approuvée par :			
Directeur SNSC :	Maman-Sani ISSA		17/05/2022

¹⁵ Note : Cette NOCES doit être en annexe du Rapport d'Evaluation ex-ante présenté à la Haute Direction puis au Conseil d'Administration.

¹⁶ ID=Investissement Direct ; IF=Intermédiaire Financier ; AB=Appui Budgétaire ; PE=Prêt Entreprise ; GU=Garantie ; APR=Accord de Participation au Risque ; PP=Prise de Participation ; FAR= Financement axé sur les Résultats.