

**DOCUMENT OF THE EUROPEAN BANK  
FOR RECONSTRUCTION AND DEVELOPMENT**

Approved by the Board of Directors on 23 June 2021<sup>1</sup>

**TUNISIA**

**SOUTHERN OASES HYDRAULIC INFRASTRUCTURE**

*[Redacted in line with the EBRD's Access to Information Policy]*

*[Information considered confidential has been removed from this document in accordance with the EBRD's Access to Information Policy (AIP). Such removed information is considered confidential because it falls under one of the provisions of Section III, paragraph 2 of the AIP]*

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<sup>1</sup> As per section 1.4.8 of EBRD's Directive on Access to Information (2019), the Bank shall disclose Board reports for State Sector Projects within 30 calendar days of approval of the relevant Project by the Board of Directors. Confidential information has been removed from the Board report.

## TABLE OF CONTENTS

	Page
<b>TABLE OF CONTENTS .....</b>	<b>2</b>
<b>ABBREVIATIONS / CURRENCY CONVERSIONS .....</b>	<b>3</b>
<b>PRESIDENT’S RECOMMENDATION .....</b>	<b>4</b>
<b>BOARD DECISION SHEET .....</b>	<b>5</b>
<b>ADDITIONAL SUMMARY TERMS FACTSHEET .....</b>	<b>6</b>
<b>INVESTMENT PROPOSAL SUMMARY .....</b>	<b>9</b>
<b>1. STRATEGIC FIT AND KEY ISSUES .....</b>	<b>9</b>
<b>1.1 STRATEGIC CONTEXT .....</b>	<b>10</b>
<b>1.2 TRANSITION IMPACT.....</b>	<b>11</b>
<b>1.3 ADDITIONALITY .....</b>	<b>12</b>
<b>1.4 SOUND BANKING - KEY RISKS.....</b>	<b>13</b>
<b>2. MEASURING / MONITORING SUCCESS .....</b>	<b>14</b>
<b>3. KEY PARTIES.....</b>	<b>16</b>
<b>3.1 BORROWER - REPUBLIC OF TUNISIA.....</b>	<b>16</b>
<b>3.2 PROJECT ENTITY – MAHRF .....</b>	<b>16</b>
<b>3.3 BENEFICIARIES – CRDAS AND GDAS.....</b>	<b>16</b>
<b>4. MARKET CONTEXT.....</b>	<b>17</b>
<b>5. FINANCIAL / ECONOMIC ANALYSIS.....</b>	<b>18</b>
<b>5.1 ECONOMIC ANALYSIS.....</b>	<b>18</b>
<b>5.2 SENSITIVITY ANALYSIS.....</b>	<b>18</b>
<b>5.3 PROJECTED PROFITABILITY FOR THE BANK .....</b>	<b>18</b>
<b>6. OTHER KEY CONSIDERATIONS .....</b>	<b>18</b>
<b>6.1 ENVIRONMENT.....</b>	<b>18</b>
<b>6.2 INTEGRITY .....</b>	<b>19</b>
<b>ANNEXES TO OPERATION REPORT .....</b>	<b>20</b>
<b>ANNEX 1 – SOUTHERN OASES AND GOVERNORATES.....</b>	<b>21</b>
<b>ANNEX 2 – PROJECT DESCRIPTION .....</b>	<b>22</b>
<b>ANNEX 3 – SOVEREIGN MACROECONOMIC ANALYSIS .....</b>	<b>23</b>
<b>ANNEX 4 – PROJECT IMPLEMENTATION .....</b>	<b>24</b>
<b>ANNEX 5 – OTHER IFIs INITIATIVES IN THE REGION.....</b>	<b>25</b>

## ABBREVIATIONS / CURRENCY CONVERSIONS

AFD	Agence Française de Développement
Capex	Capital Expenditure
CRDA	Regional Commission for Agricultural Development
EIRR	Economic Internal Rate of Return
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
ESDD	Environmental and Social Due Diligence
EUR	Euro
FDI	Foreign Direct Investment
GDA	Agriculture Development Group
GDP	Gross Domestic Product
GoT	Government of Tunisia
GHG	Greenhouse Gas
KPI	Key Performance Indicator
IFI	International Financial Institution
IMF	International Monetary Fund
M <sup>3</sup>	Cubic meter
MAHRF	Ministry of Agriculture, Hydraulic Resources and Fisheries
MDCI	State Secretary for International Cooperation and Development
MoE	Ministry of Environment
MoF	Ministry of Economy and Finances
O&M	Operations and Maintenance
PIU	Project Implementation Unit
PP&R	Procurement Policies and Rules
SECO	Switzerland's State Secretariat for Economic Affairs
SPP	Stakeholder Participation Programme
SSF	Shareholder Special Fund
TC	Technical Co-operation
TND	Tunisian Dinar
USD	US dollar
VAT	Value Added Tax

### CURRENCY EQUIVALENTS

(for the purpose of this paper and unless otherwise stated)

Currency Unit = EUR & TND  
EUR 1.00 = TND 3.31

Currency Unit = USD & TND  
USD 1.00 = TND 2.72

2 June 2021

## PRESIDENT’S RECOMMENDATION

This recommendation and the attached Report concerning an operation in favour of the Republic of Tunisia (the “**Borrower**”) for the benefit of the Ministry of Agriculture, Hydraulic Resources and Fisheries (the “**MAHRF**” or “**Project Entity**”), a ministry responsible for the management of water resources in Tunisia, are submitted for consideration by the Board of Directors.

The facility will consist of a sovereign loan in the amount of up to EUR 49 million for modernisation of the public hydraulic infrastructure serving Tunisia’s oases in southern governorates of Gabes, Gafsa, Kebili and Tozeur (the “**Project**”). The Project aims to restore and rehabilitate the aged infrastructure in 37 oases ecosystems and to improve access to water for irrigated agriculture for over 6,800 farmers and their immediate families. The Project was developed at the MAHRF’s initiative [REDACTED], which places sustainable water management among the top priorities of the country, especially in Southern Tunisia where the population relies heavily on irrigated agriculture as the main income-generating activity. The Project will contribute to socioeconomic stability, will catalyse women’s and young people’s access to economic opportunities and will mitigate emigration pressure from the region.

The expected transition impact of the Project stems from the *Inclusive* quality through reducing regional disparities in terms of access to local economic opportunities and promoting economic inclusion for women and young people; and in the form of the *Well-governed* quality through considerable governance and operational improvements at the MAHRF centrally and at the local level.

Pre-signing technical cooperation (“**TC**”) for this operation has been provided to conduct a comprehensive feasibility study and was financed by the Bank through the Infrastructure Project Preparation Facility (“**IPPF**”). The post-signing TCs to assist with the project implementation support and supervision services have been approved for financing [REDACTED]. The promotion of equal opportunities within CRDAs and GDAs, to increase the female participation in water-related decision-making is also proposed to be financed [REDACTED]. In addition, a TC to support women and youth in accessing existing economic opportunities in the project area as well as to start identifying opportunities for future income generation that will reduce dependence on fossil groundwater resources is proposed [REDACTED].

I am satisfied that the operation is consistent with the Bank’s Country Strategy for Tunisia, the Municipal and Environmental Infrastructure Sector Strategy, Economic Inclusion Strategy, the Strategy for the Promotion of Gender Equality (2016-2020), the Agribusiness Sector Strategy, and with the Agreement Establishing the Bank.

I recommend that the Board approve the proposed loan substantially on the terms of the attached Report.

**Odile Renaud-Basso**

## BOARD DECISION SHEET

TUNISIA - Southern Oases Hydraulic Infrastructure- DTM 49250	
<b>Transaction / Board Decision</b>	Board approval <sup>2</sup> is sought for a sovereign loan of up to EUR 49 million in favour of the Republic of Tunisia (the “ <b>Borrower</b> ”) for the benefit of the Ministry of Agriculture, Hydraulic Resources and Fisheries (the “ <b>MAHRF</b> ” or “ <b>Project Entity</b> ”), a line ministry responsible for management of water resources and agriculture in Tunisia, to finance modernisation of the public hydraulic infrastructure serving oases of four water-scarce southern governorates of Tunisia: Gabes, Gafsa, Kebili, and Tozeur.
<b>Client</b>	Republic of Tunisia (the “ <b>Borrower</b> ”) is rated B/negative by Fitch and B3/negative by Moody’s. The Ministry of Agriculture, Hydraulic Resources and Fisheries (the “ <b>MAHRF</b> ” or “ <b>Project Entity</b> ”) is directly responsible for developing and implementing water production and distribution policies in Tunisia, including state-owned irrigation infrastructure management and water conservation and efficiency programmes. The MAHRF will have overall responsibility for the implementation of the Project. The relevant Regional Commissions for Agricultural Development (“ <b>CRDAs</b> ”), which represent MAHRF at governorate levels will be the beneficiaries of the Project following completion of its implementation, and the water users’ associations (“ <b>GDA</b> s”) pertaining to the Project’s catchment area will be among the direct recipients of TC support.
<b>Main Elements of the Proposal</b>	<p><u>Transition impact</u></p> <ul style="list-style-type: none"> <li>• <i>Inclusive:</i> The Project will increase agricultural yield of the date palm production by increasing working days in the sector [REDACTED]; promote economic opportunities for women and youth in the Project’s catchment areas; and promote equal opportunities within CRDAs and GDAs strengthening participation of women in water-related decision-making. It will also address the depletion of non-renewable groundwater resources by implementing a training programme to promote more sustainable agricultural practices and water management among farmers, and identify entry points for the development of alternative income sources for the farmers in the longer term.</li> <li>• <i>Well-Governed:</i> The Project will promote (i) enhanced operational and asset maintenance capacity at the local level; and (ii) improved governance structures by strengthening the water management contracts and the irrigation tariff framework.</li> </ul> <p><u>Additionality:</u> derives from (i) the financing structure as the Bank will provide long-term financing unavailable from commercial banks; (ii) standard setting through achieving greater inclusion and increased equality of opportunity via development and implementation of Equal Opportunities Action Plans at water resource related decision-making bodies.</p> <p><u>Sound banking:</u> The transaction is a sovereign loan.</p>
<b>Key Risks</b>	<p><u>Sovereign Creditworthiness Risk:</u> [REDACTED]</p> <p><u>Project Implementation/Operational Risk:</u> Dedicated technical assistance will be provided to MAHRF to support the implementation of the Project; and to the Beneficiaries to enhance the operational capacity and governance at the local level.</p> <p><u>Water Sustainability Risk:</u> In light of the environmental impacts, the Project was structured with a comprehensive technical cooperation package, including: (i) support to the development of a long-term sustainable strategy to address the water scarcity in the region; (ii) support at the local level to improve water application techniques; and (iii) support for the implementation of a tailored ESAP.</p>
<b>Strategic Fit Summary</b>	The Project is in line with the Bank’s Country Strategy for Tunisia, the Municipal and Environmental Infrastructure Sector Strategy, Economic Inclusion Strategy, the Strategy for the Promotion of Gender Equality (2016-2020) , the Agribusiness Sector Strategy, and with the Agreement Establishing the Bank.

<sup>2</sup> Article 27 of the AEB provides the basis for this decision.

## ADDITIONAL SUMMARY TERMS FACTSHEET

<b>EBRD Transaction</b>	A sovereign loan of up to EUR 49 million to the Republic of Tunisia (“ <b>Borrower</b> ”) to finance modernisation of the public hydraulic infrastructure serving oases of four water-scarce southern governorates of Gabes, Gafsa, Kebili and Tozeur (altogether, the “ <b>Governorates</b> ”). [REDACTED] The Southern oases of Tunisia cover around 0.3 per cent of the total country area and are home to approximately 10 per cent of the population. These oases are the primary source of income and employment in the region, with irrigated agriculture providing jobs to 35 per cent of the working population. <i>Annex 2 provides more detailed information about the Southern Oases.</i> The Project is structured as part of an integrated approach complemented by a comprehensive technical assistance support and in close coordination with the initiatives promoted by other IFIs in the region with the aim of maximizing the impact, viability, and the functionality of the Project assets.
<b>Existing Exposure</b>	[REDACTED]
<b>Maturity / Repayment</b>	18 years tenor [REDACTED].
<b>Potential AMI eligible financing</b>	None
<b>Use of Proceeds</b>	<p><u>Project Scope.</u> The proceeds of the loan will be used for the (i) rehabilitation and replacement of up to 22 deep boreholes; (ii) decommissioning of up to 20 deep boreholes; (iii) rehabilitation and construction of associated hydraulic infrastructure (including, borehole heads, water cooling systems, pumps and meters); and (iv) improvements over 2,400 ha of the irrigation and drainage networks (the “Project”). The Project will aim to restore and rehabilitate the aging infrastructure [REDACTED], improve access to irrigation water to over 6,800 farmers and their immediate families living in the catchment area of the Project and will result in substantial economic and social benefits. Given the current high water losses from the borehole to farm plots (54 per cent), an investment component for improvement of the irrigation and drainage networks (i.e., replacement of dilapidated canal sections and cleaning of open drains) was also introduced in the Project scope to maximise irrigation efficiency [REDACTED] and optimise the use of scarce water resources served by the Project boreholes. The Project will be implemented centrally by the MAHRF while the beneficiaries of the Project infrastructure will be the CRDAs and the GDAs who will be direct recipients of TC support. A dedicated Project Implementation Unit (“PIU”) will be created at the level of the MAHRF to manage the implementation of the Project, conducting procurement processes and acting as the contracting authority for the different Project components. The PIU will receive support from project implementation consultants in procurement preparation, construction supervision, environmental and social management.</p> <p><u>Disbursement.</u> Procurement of all loan-financed contracts will be carried out in accordance with the Bank’s PP&amp;R. Disbursements will be made directly to the contractors in line with the respective contract conditions, in accordance with the Bank’s Disbursement Handbook. The construction works will be supervised by an independent Supervision Engineer (under the TC3: Construction Supervision Assignment) who will verify use of proceeds, and the Project Entity will be supported by an independent procurement and implementation consultant (under TC2: Project Implementation Support).</p>
<b>Investment Plan</b>	[REDACTED]

<b>Financing Plan</b>	[REDACTED]
<b>Key Parties Involved</b>	<b>Borrower:</b> GoT <b>Project Entity:</b> MAHRF <b>Beneficiaries:</b> Relevant CRDAs and GDAs
<b>Conditions to effectiveness</b>	<ul style="list-style-type: none"> <li>Loan Agreement duly authorised and, if applicable, ratified by all necessary legal, governmental and parliamentary actions. [REDACTED]</li> </ul>
<b>Conditions to first disbursement</b>	<ul style="list-style-type: none"> <li>Establishment of the PIU with adequate resources and suitably qualified personnel, under terms of reference acceptable to the Bank.</li> <li>Appointment of the consultant in charge of TC2: Project Implementation Support.</li> </ul>
<b>Key Covenants</b>	[REDACTED]
<b>Security</b>	Sovereign loan.
<b>Other material agreements</b>	<ul style="list-style-type: none"> <li>Loan Agreement [REDACTED]</li> </ul>
<b>Associated Donor Funded TC</b>	<ul style="list-style-type: none"> <li><b>TC1: Feasibility Study</b> (pre-loan signing) covering technical, environmental, economic and financial due diligence aspects of the Project. [REDACTED]</li> <li><b>TC2: Project Implementation Support</b> to assist the PIU with the Project implementation, including review of the technical and E&amp;S requirements and the procurement cycle, management and mitigation of environmental and social impacts and risks, contract management and administration. [REDACTED]</li> <li><b>TC3: Construction Supervision.</b> [REDACTED]</li> <li><b>TC4: Support to Institutional Reforms</b> to support MAHRF on the development of a long term and sustainable water management strategy to address water scarcity in the Southern region introducing, inter alia, measures to reduce water demand and further improve water use efficiency, diversify local economy, enforce penalties on illegal drillings, and encourage multilevel cropping and biodiversity as well as by identifying alternative water resources (desalination, reuse of treated wastewater and artificial aquifer recharge) for the region. [REDACTED]</li> <li><b>TC5: Corporate Development and Stakeholder Participation Programme (“CDSPP”).</b> The objectives of this assignment are two-fold: (1) strengthen the operational capacity of CRDAs and GDAs to enable better management of non-renewable groundwater sources and hydraulic infrastructure, and (2) improve farmers’ agricultural practices and water use to slow down depletion of non-renewable groundwater resources. Recognising the important role that women traditionally play in agriculture and water management, the assignment will also bring in a dedicated gender perspective by promoting women’s participation in CRDAs and GDAs and ensuring a gender-sensitive approach to training. [REDACTED]</li> <li><b>TC6: Inclusion Programme in the Southern Oases, Tunisia: Enhancing Economic Opportunities for Women and Youth.</b> The objective of this assignment is to, in collaboration with MAHRF and key local and regional stakeholders, (a) support women and youth in accessing existing economic opportunities in the project area by supporting entrepreneurship development and on-the-job training, as well as (b) identify opportunities for future income generation that reduce dependence on fossil groundwater resources. [REDACTED]</li> </ul> <p><i>Reimbursement:</i> The above TC assignments will be a non-reimbursable TC required to support the Project.</p>

	<p><i>Parallel Contribution:</i> Government of Tunisia will make a parallel contribution to the Project via co-financing of the services of the Supervision Engineer and the payment of any VAT (standard rate 19%) and other required indirect tax payments related to the TC assignment.</p> <p><i>In-kind Contribution:</i> MAHRF will provide in-kind support in the form of office space and so on, for the consultants to work.</p>
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[REDACTED]



## INVESTMENT PROPOSAL SUMMARY

### 1. STRATEGIC FIT AND KEY ISSUES

Despite only occupying 8 per cent of Tunisia's agricultural land, irrigated agriculture accounts for up to 10 per cent of total exports and 27 per cent of agricultural employment in Tunisia.

[REDACTED] The Southern Oases contain around 210 oases, concentrated mainly in the governorates of Kébili (58 per cent), Tozeur (21 per cent), Gabès (16 per cent) and Gafsa (5 per cent) and are home to 10 per cent of the total Tunisian population. These oases are the primary source of income and employment, with irrigated agriculture providing jobs to 35 per cent of the working population.

Southern Tunisia receives as little as 100 mm of rainfall per year and the oases rely almost entirely on fossil groundwater from the Northern Sahara Aquifer System ("SASS") for irrigation. The SASS is a barely-rechargeable sedimentary basin containing deep underground water volumes of over one million km<sup>2</sup>, which is shared across Algeria, Libya, and Tunisia [REDACTED].

Irrigated agriculture has been the main economic driver in this region since the late 1970s when the GoT began its Oases Development Strategy, which was partially designed to support its goal to populate the South [REDACTED], as well as invest in irrigation infrastructure and promote Deglet Nour palm date cultivation for export. From the late 1970s to the 1990s, the GoT oversaw the installation of deep boreholes designed to abstract groundwater from the SASS. At the same time, despite the prohibition of digging wells more than 50m deep, illegal drilling continued throughout the South, causing an anarchic oases development.

The existing public hydraulic infrastructure (including deep boreholes and associated infrastructure) is deteriorating, losing abstraction capacity (40 per cent lower than the design flow rates) and approaching the end of its lifespan of 30 years, and hence impacting the livelihoods in the area. The overall performance of the irrigated agriculture in the Project area remains also below its potential [REDACTED].

Therefore, there is currently a significant water shortage that can have serious social and economic consequences in a region dependent on irrigated agriculture. The declining quality and quantity of the irrigation water supply has caused a decrease in the area under cultivation in both oases and greenhouses with a corresponding decrease in crop yields and incomes, thus jeopardising the economic security of farmers in the region.

The Project has arisen from the MAHRF's initiative [REDACTED]. This plan places sustainable water management among the top priorities of the country, especially in Southern Tunisia where the population relies heavily on irrigated agriculture as an income-generating activity. In the long run, the region is likely to be required to diversify from water-intensive agriculture for a sustainable and durable development of the Southern Oases.

The Project covers 37 oases over 3,640 ha and 28 geothermal perimeters (with 2,800 greenhouses) and aims to restore and enhance oases ecosystems' resilience, to improve access to irrigation water across the Governorates and to bolster the regional irrigated agriculture sector. Specifically, the Project will improve access to irrigation water to over 6,800 farmers and their immediate families living in the catchment area of the Project and will result in substantial economic and social benefits. In the absence of viable immediate alternatives, the Project will tap into non-renewable groundwater as a transition

solution essential for maintaining socioeconomic stability, securing livelihoods for young people, catalysing women's access to economic opportunities, and mitigating emigration pressure from the region. In addition to supporting the access to existing economic opportunities, the Project will start to identify opportunities for future income generation that reduce dependence on fossil groundwater resources.

## 1.1 STRATEGIC CONTEXT

The Project is structured to increase local resilience in the short- to medium-term and an interim solution to address the urgent social and economic needs in the region while supporting the GoT (through technical cooperation) to develop a sustainable and long term strategy to address regional issues around water scarcity, and promote efficient and sustainable use of water.

In light of the environmental impacts, and in order to maximise its functionality, viability and impact, the Project is structured as part of a holistic and integrated approach complemented by (i) technical assistance activities (including, support on the institutional reforms, improved governance and operational capacity at local level, better irrigation practices and more inclusive decision making); (ii) coordinating IFIs initiatives in the sector. [REDACTED]

This is the first transaction of the Bank targeting construction and rehabilitation of hydraulic infrastructure and therefore in line with the MEI strategy which promotes innovative investments in expanded areas of operations beyond the core municipal services.

The Project will also address the following key strategic priorities as outlined in the MEI strategy, and in the Tunisia Country Strategy:

1. *“Promote Economic Inclusion for Women, Young People and Populations Living in Remote Areas (...)”* (Tunisia CS); *“drive sector sustainability”* (...) through *“promoting infrastructure investments that address migration challenges and other social sectors and (...) supporting social inclusiveness”* (MEI Strategy); and
2. *“Increased private sector participation in some state dominated sectors and support SOE reform”* (Tunisia CS); *“drive sector sustainability”* (...) by *“improving asset management practices; supporting client capacity building; and improve public governance/policy assistance to support government’s regulatory initiatives”* (MEI Strategy).

Promote Economic Inclusion – The Project enhances economic inclusion through promoting access to employment and entrepreneurship for women, young people and populations from less-developed regions and promotes the voice of women in decision-making.

The Project is therefore fully in line with the Bank’s Strategy for the Promotion of Gender Equality and with the Economic Inclusion Strategy (EIS). Given its impact on irrigated agriculture, the Project is also consistent with the Agribusiness Strategy through (i) promoting enhanced productivity and value addition through targeted increased agricultural yields and greenhouse cultivation, (ii) sustainable agribusiness through targeted improvements in water use, and (iii) inclusive value chains thanks to the Project’s support to rural and regional development and employment through the inclusion of smallholders with special focus on female and young farmers.

Improve Public Governance – The Project, through the provision of technical assistance activities, will promote (i) enhanced operational, organisational and asset maintenance practices at the local level; (ii) improved governance structures by strengthening the water management contracts between CRDAs and

GDAs, and enforcement of prevention of illegal drilling; (iii) stakeholder awareness to conserve water resources; and (iv) implementation of tariff reforms in line with the recommendations of TC5: CDSPP.

Also, the Project will present better opportunities for private sector participation through openly and competitively tendered design, build and operate contracts [REDACTED]. So far, the implementation of the hydraulic infrastructure projects has been mainly conducted by the public sector (i.e., CRDAs). The [REDACTED] operation period will ensure operational performance in line with required standards and will provide on-the-job training to CRDAs which will be responsible for the O&M of the hydraulic infrastructure.

Through technical assistance, consultants are expected to propose an improved tariff scheme in the Project area [REDACTED]

The Project also contributes to a host of UN Sustainable Development Goals (SDGs), namely: SDG 4: Quality Education, SDG 5: Gender Equality, SDG 6: Clean Water and Sanitation, SDG 8: Decent Work and Economic Growth, SDG 9: Industry, Innovation and Infrastructure, SDG 10: Inclusion, and SDG 12: Responsible Consumption and Production.

## 1.2 TRANSITION IMPACT

The table below sets out the TI Objectives and details of the Project. The relevant Monitoring Indicators and timing for their delivery are shown in Section 2.

Obj. No.	Objective	Details
<b>Primary TI Quality: Inclusive</b>		
1.1	<i>The project will create new economic opportunities for women/the-local population in a less developed region through increased access to services [REDACTED] and training [REDACTED] people.</i>	<p>The Project will address economic inclusion in the Southern Oases by enhancing economic opportunities for the local population through improved access to irrigation to over 6,800 farmers and their families living in the catchment area.</p> <p>Increased access to irrigation is expected to lead to improved agricultural productivity in the date palm production [REDACTED], expected to benefit women due to their significant participation in date packaging. A dedicated ‘Economic Inclusion Plan’ will be developed to identify further employment and entrepreneurship opportunities for local women and youth in the short- to medium-term, training [REDACTED] women and youth.</p> <p>In addition, the Project will strengthen access to skills and protect rural livelihoods in the longer term, by supporting the upskilling and training of [REDACTED] local farmers – men and women – on more sustainable water use and agricultural techniques. This will reduce water wastage and contribute to extending the lifespan of non-renewable groundwater resources by increasing the average irrigation efficiency [REDACTED]. Cognisant of the fact that groundwater risks to be depleted eventually, the Project will also start the process of identifying alternative income sources for the population in the Southern Oases.</p>
1.2	<i>The project will introduce improved policy practices (e.g.</i>	The Project will improve equal opportunities policies and practices at the level of CRDAs and GDAs through the development and implementation of targeted Equal Opportunities Action Plans. At CRDA level, the Action

	<i>market relevant curricula).</i>	Plan is expected to enhance the gender awareness of CRDA managers and field agents through institutional capacity building on the role of rural women in water resource management. At GDA level, it is expected that the Action Plan will result in greater representation of women in decision making positions [REDACTED].
<b>Secondary TI Quality: Well-Governed</b>		
2.1	<i>The project will target a range of measures to improve the overall governance and performance of the sector – including tariff reforms and other measures expected to result in a substantial improvement in the opex recovery ratio.</i>	The Project will seek to introduce a variety of reforms to improve the overall governance and performance of the oases water sector. This will include improvements to the contractual relationship between CRDAs and GDAs, the review of pricing methodology to improve incentives for efficiency, improvements in levels of bill collection / payment and tariff reform resulting in overall increases in the level of cost recovery. The Project will also pursue measures to reduce the use of illegal boreholes across the Southern Oases and encourage private sector development through the outsourcing of some activities.

**Delivery Risks:** The key risks to achieving transition impact are the potential delays in the implementation of the Project and the deployment of the associated TC activities which are designed to maximise the viability, functionality and impact of the Project.

The risk is mitigated for the proposed Project by (i) the past experience of MAHRF with the World Bank where the results from physical investments under the Water Sector Investment Programme (“PISEAU”) exceeded set targets, and further supported by PIU consultants; and (ii) the recent commitment from GoT and MAHRF on implementing the required institutional reforms in the sector as demonstrated by the new Water Code expected to be published later in 2021; and GoT’s agreement to adopt future specific outcomes and measures under the associated TCs of the Project (covenanted under the loan agreement).

### 1.3 ADDITIONALITY

Identified triggers	Description
No triggers identified	n/a

Additionality sources	Evidence of additionality sources
<b>Financing Structure</b> <ul style="list-style-type: none"> <li>EBRD offers financing that is not available in the market from commercial sources on reasonable <b>terms and conditions</b>, e.g. a longer grace period. Such financing is necessary to structure the project.</li> <li>EBRD offers a <b>tenor</b>, which is longer than available to the client in the market on reasonable terms and conditions.</li> </ul>	The maturities required for long-term financing are currently unavailable from commercial banks and infrastructure financing is dominated by loans from IFIs. [REDACTED]
<b>Standard-setting: helping projects and clients achieve higher standards</b>	The Project will improve equal opportunities policies and practices at the level of CRDAs and GDAs through the development and

<ul style="list-style-type: none"> <li>– Client seeks/makes use of EBRD expertise on higher inclusion (e.g. adherence to labour standards which goes beyond the provisions set in PR2 of the environmental and social policy, development of comprehensive and institutional corporate social responsibility programmes), gender standards and/or equal opportunities action plans (e.g. improving women's access to safe transport and/or women-led businesses participation in the client supply chain).</li> <li>– Client seeks/makes use of EBRD expertise on best international procurement standards.</li> </ul>	<p>implementation of targeted Equal Opportunities Action Plans.</p> <p>Procurement of all loan-financed contracts will be carried out in accordance with the Bank's PP&amp;R using ECEPP and the Bank's standard tender documents. The MAHRF's implementation capacity will be supported by an international consultant to assist with the entire procurement cycle. Additionally, construction supervision support will provide oversight on all the construction activities.</p>
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#### 1.4 SOUND BANKING - KEY RISKS

Risks	Probability / Effect	Comments
Sovereign credit worthiness risk	Medium/High	Tunisia is rated B/negative by Fitch and B3/negative by Moody's. Negative growth in 2020 should be followed by a recovery in 2021. [REDACTED]
Project Implementation Risk	Medium/High	[REDACTED] MAHRF has experience in working with other IFIs (i.e., World Bank) and to mitigate the risk, a PIU technical assistance programme will be put in place to support the implementation of the Project. An International consultant will be contracted to assist with the entire procurement cycle and to ensure that the procurement process is done in accordance with the EBRD PP&R. Additionally, construction supervision support will provide oversight on all the construction activities.
Operational /asset maintenance Risk	Medium/ Medium	[REDACTED] Targeted technical assistance activities will be provided to enhance their operational capacity and to develop appropriate O&M manuals to ensure adequate asset maintenance.
Water Sustainability Risk	Medium/High	The Project assets will tap into non-renewable groundwater resources [REDACTED]. In light of the environmental and sustainability consideration, the Project has been structured with a comprehensive technical cooperation package that aims to realise the full benefits of the Project, including: (i) support to the development of a long term and sustainable strategy to implement water demand control and alternative supply measures in the region (ii) support at the local level to the use of water saving irrigation techniques; (iii) support for the mitigation of environmental social impacts and risks during construction and operations and for the implementation of the ESAP.

## 2. MEASURING / MONITORING SUCCESS

<i>Overall objectives of project</i>	<i>Monitoring benchmarks</i>	<i>Implementation timing</i>
- On-time project implementation	<ul style="list-style-type: none"> <li>- PIU has been established in a form and substance satisfactory to the Bank</li> <li>- Completion according to the timeline and within the budget</li> </ul> Improved access to water and irrigation systems as a result of the investment	[REDACTED]

### TI indicator(s), primary Quality: Inclusive

Obj. No.	Monitoring indicator	Details	Baseline	Target	Due date	Donor
1.1	Number of individuals (local population) with improved access to water services (incl. improved irrigation)	This Project will improve access to irrigation to over 30,000 individuals living in the catchment area.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
1.2	Agriculture productivity of the beneficiaries	The Project will increase agricultural yield in the date palm production [REDACTED].	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
1.3	Number of local population enhancing their skills as a result of training	The Project will support entrepreneurship development and on-the-job training. As a result, [REDACTED] women and youth will benefit from training.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
1.4	Number of local population enhancing their skills as a result of training	<p>The Project will develop and implement a Training-of-Trainers to provide local farmers with new skills on more sustainable water use and agricultural techniques.</p> <p>As a result [REDACTED] local farmers – men and women –will benefit from training on water management and agriculture development.</p>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

1.5	Recommended policy or strategy or regulatory framework/ standard agreed by relevant stakeholder(s)	The Project will develop and implement an Equal Opportunities Action Plan at the level of CRDAs, with the aim of increasing gender awareness among managers and field staff.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
1.6	Recommended policy or strategy or regulatory framework/ standard agreed by relevant stakeholder(s)	The Project will develop and implement an Equal Opportunities Action Plan at the level of GDAs, with the aim of increasing the share of women on GDA boards.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

**TI indicator(s), secondary Quality: Well-Governed**

Obj. No.	Monitoring indicator	Details	Baseline	Target	Due date	Donor
2.1	Recommended policy agreed by client	Implementation of a improved water management contract template with clear definition of roles and responsibilities. Compliance with O&M manuals.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2.2	Tariff reform in target segment adopted by authorities	Implementation of a new tariff plan (to be proposed by the consultants under TC) [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



### 3. KEY PARTIES

#### 3.1 BORROWER - REPUBLIC OF TUNISIA

GDP contracted by 8.8 per cent in 2020 [REDACTED] because of the pandemic. The biggest contraction were in tourism (-43.3 per cent) and transport (-27.7 per cent), followed by textiles and mechanical and electrical industries (both export-oriented) and construction. In contrast, refining, water and telecommunication posted positive growth, in addition to agriculture and agribusiness, thanks to a record-breaking olive oil harvest in 2019-20.

Unemployment jumped to 17.4 per cent at end 2020 [REDACTED].

#### 3.2 PROJECT ENTITY – MAHRF

MAHRF is the ministry responsible for developing and implementing water production and distribution policies, including state-owned irrigation infrastructure management and water conservation and efficiency programmes.

The MAHRF is comprised of numerous agencies that act in planning and implementing actions and in preparing five-year plans, programs and projects, in the establishment of hydraulic infrastructures as well as in the water resource abstraction and management works. The main directorate involved in the water sector and in the implementation of the Project is the General Directorate of Rural Engineering and Water Exploitation (“**DGGREE**”): this Directorate is in charge of the strategic planning and implementation of the state policy on the use of water resources for irrigation and for domestic water supply purposes irrespective of the water resource (conventional or non-conventional, treated or brackish treated water). The DGGREE is responsible for the planning and the creation of irrigated perimeters, efficient use of irrigation water, planning and supply of drinking water in rural areas, and the development of infrastructure including boreholes.

The other Directorates involved in the water sector are the following: The General Directorate of Water Resources (“**DGRE**”), The General Directorate of Dams and Large Hydraulic Works (“**DGBGTH**”), Office of Planning and Hydraulic Balance (“**BPEH**”), and The General Directorate of Agricultural Development and Conservation (“**DGACTA**”).

MAHRF supervises and coordinates 24 CRDAs, the regional irrigation and agricultural development agencies, including the 4 CRDAs pertaining to the Project area.

#### 3.3 BENEFICIARIES – CRDAS AND GDAS

The CRDAs represent the MAHRF at the governorate level in accordance to the Law No 44 1989, later amended in 1994. The entire strategic planning executed at central level is performed in close coordination with the CRDAs, which are financially independent from the MAHRF (with their own budgets [REDACTED]).

The 4 CRDAs pertaining to the Project catchment area manage the provision of irrigation water at the borehole level. The O&M of the boreholes (including interior cleaning every five years) and associated hydraulic infrastructure is the responsibility of the CRDAs. Currently, the O&M is not performed regularly [REDACTED].



The CRDAs are also responsible for law enforcement concerning conservation of water resources and prevention of illegal drilling. [REDACTED]

While the boreholes and associated infrastructure are MAHRF's property, all Project oases and geothermal perimeters ("GPs") are managed by a total of 42 GDAs which all have water management contracts with the appropriate CRDA. The GDAs are responsible for providing water inside the irrigated perimeters, for invoicing water users and the functioning of secondary and tertiary irrigation infrastructure. They are responsible for the O&M of irrigation and drainage networks and pumps inside the irrigated perimeters.[REDACTED]

The 4 CRDAs will be the ultimate beneficiaries of the Project assets as well as the 42 GDAs as direct recipients of TC support. Following the construction, the CRDAs will be responsible for operation and management of assets.

A CDSPP TC programme will be provided as part of the Project at the level of the CRDAs and GDAs targeted on (i) reactivating the contractual relation between the parties; (ii) developing appropriate and timely O&M practices; (iii) improving the financial sustainability of its operations (though improved tariffs frameworks and measures to improve coast recovery); (iv) raising awareness for more efficient water application practices.

#### 4. MARKET CONTEXT

[REDACTED] Tunisia developed a national water policy in the 1970s which has been updated since then but mainly focusing on water supply improvements [REDACTED]. The water management plan for Southern Tunisia was launched in 1979 with the promotion of their valuable *Deglet Noor* date variety for export. Securing water supply for irrigation has been a national priority and was supported by the installation of dozens of deep boreholes and the promotion of participatory management (with the establishment of GDAs). Today more than 226,000 ha nationwide are under public management (including all the oases in the Project Area). In addition, about 175,000 ha nationwide are private irrigated perimeters which rely on shallow wells (often illegal) installed by farmers. From 1976, geothermic water use also became a part of the national water resources development strategy and there are now a total of 257 ha of geothermal perimeters in the Project Area.

The national water strategy and vision for 2050 is currently under preparation and funded by the AfDB, KfW and GIZ. The Bank intends to complement these efforts by supporting of a long term water strategy tailored and focused on the southern region.

*Legal Setup:* The main legal instrument for water resources management is the Water Code of 1975, amended through time. The key provisions are that the surface and groundwater resources are in public domain and that water users should pay operating costs for water usage. [REDACTED]

A new Water Code is expected to be adopted later in 2021 and can be considered as a considerable overhaul of the existing Water Code. The key changes include the implementation of new measures to control water demand, protect the quality of water resources and avoid its overexploitation, requiring water meters at all distribution points and increased penalties for infractions [REDACTED].

##### *Tariff framework:*

Tariff levels vary across Tunisia. According to the water management contracts, the GDAs determine the tariffs, billing and collection methods and penalties for non-payment. The tariffs for irrigation water are much lower than for the public water supply, which are already subsidised by the GoT. [REDACTED]

## 5. FINANCIAL / ECONOMIC ANALYSIS

### 5.1 ECONOMIC ANALYSIS

[REDACTED]

### 5.2 SENSITIVITY ANALYSIS

[REDACTED]

### 5.3 PROJECTED PROFITABILITY FOR THE BANK

[REDACTED]

## 6. OTHER KEY CONSIDERATIONS

### 6.1 ENVIRONMENT

Categorised B (2014 ESP). The Project involves the rehabilitation of existing irrigation infrastructure associated with selected boreholes in the Governorates. These Governorates, and more widely Southern Tunisia, rely almost entirely on fossil groundwater from the SASS for irrigation. While the SASS is a non-renewable aquifer whose quantity and quality will eventually decline, the Project aims at enhancing the resilience of the oases systems by improving water efficiency and reducing water losses and the proposed works do not constitute a Greenfield or a major extension project. In light of the sustainability consideration of the aquifer, the EBRD will support the MAHRF through a number of Technical Assistance programs in implementing a long term and sustainable water strategy to address water scarcity in the southern region, including the promotion of the use of non-conventional water resources such as desalination and wastewater and a strategy to diversify the local economy away from water-intensive industries.

Independent consultants have undertaken an extensive Environmental and Social Assessment as part of the Feasibility Study (“FS”). The FS exercise started in 2017 and included, *inter alia*: an environmental and socio-economic baseline; water resources assessment; climate change risk and vulnerability assessment; assessment of past and current levels of land use and agricultural yields and opportunities for improving crop diversity and yields; technical assessment of the irrigation and water supply infrastructure and services; an environmental and social audit; and other aspects of risk assessment.

Different project alternatives were assessed in terms of design, cost, environmental and social considerations in order to result in the best strategic solution in terms of the chosen scope. The no-project alternative was also duly considered but was not favoured due to the rising socio-economic challenges in this agricultural-dependent region of Tunisia. The priority investment program proposed by the FS consultants was tailored to maximise the Environmental and Social (“E&S”) benefits, of the Project, which can be summarised as follows:

- Optimise water resources management and reduce water losses from 54 per cent to 39 per cent;
- Optimise irrigation water supply which will increase crop yields and incomes within the Governorates;
- Improve governance and management of the boreholes;
- Reduce soil salinization;
- Improve management of two RAMSAR sites in the Project Area;
- Decrease the proliferation of illegal boreholes in the upper aquifer;
- Increase biodiversity of date palms and other agricultural crops in Project oases;

- Create direct and indirect employment opportunities during the construction and/or operation phases of the individual Project components;
- Reduce pest infestations and the need for pesticides use;
- Mitigating emigration pressure;
- Reduce conflicts between competing water users (e.g. hammams and oases);
- Enhance women's socioeconomic status by increasing their access to economic opportunities related to agriculture, their involvement in GDAs and decision making around water.

Whereas, main potential adverse impacts from the Project implementation are the following:

- Temporary economic displacement may occur during the construction phase in the case of borehole rehabilitation, where the irrigation water supply would be interrupted if there is no nearby borehole from which water may be diverted;
- Soil and water pollution risks emanating from construction works;
- If construction or decommissioning of the proposed Project boreholes is not correctly performed, this may pose a risk to groundwater quality because of potential cross contamination of aquifer units and gypsum layers and from the land surface;
- Adverse operation impacts are mainly associated with groundwater depletion and salinisation due to excessive and uncontrolled water abstraction.

The due diligence has included the development of an extensive Environmental and Social Action Plan ("ESAP"), which includes a series of actions to structure the Project in line with the Bank's E&S requirements. These include the development of E&S management systems and plans; contractor E&S provisions; strengthen the human resources and capacity building in terms of E&S matters; undertaking resource efficiency analysis and longer term sustainability analysis; implementing water efficiency measures for both the greenhouses and oases irrigation; provisions to manage labour and biodiversity risks; health and safety requirements; promotion of diversified crops cultivation; appropriate consideration of dredged material disposal; and the undertaking of the necessary monitoring and maintenance of the infrastructure. The audit demonstrated that the present E&S resources and organisational capacity in the regional directorates is poor. The TC for PIU implementation support therefore includes a strong ESAP implementation support component and training and capacity building of MAHRF and the CRDAs selected staff. The audit demonstrated that the present E&S resources and organisational capacity in the regional directorates is poor. The PIU implementation support technical assistance therefore includes a strong ESAP implementation support component and training and capacity building of MAHRF and the CRDAs selected staff.

The due diligence included the development of a Stakeholder Engagement Plan, a Non-Technical Summary, a Groundwater Sustainability study and the E&S Management and Monitoring Plans which have been disclosed since October 2020 to guide stakeholder engagement and awareness raising and to communicate details of the Project.

## 6.2 INTEGRITY

In conjunction with OCCO, integrity due diligence was undertaken on the MAHRF, its senior management, and affiliated agencies. [REDACTED]

All actions required by applicable EBRD procedures relevant to the prevention of money laundering, terrorist financing and other integrity issues have been taken with respect to the project, and the project files contain the integrity checklists and other required documentation which have been properly and accurately completed to proceed with the project.

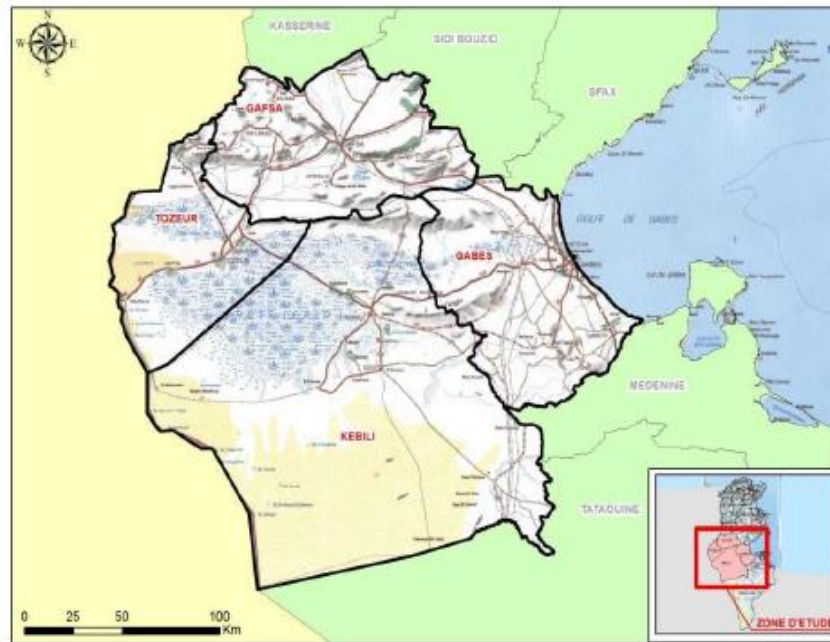
**ANNEXES TO OPERATION REPORT**

ANNEX 1	SOUTHERN OASES AND GOVERNORATES
ANNEX 2	PROJECT DESCRIPTION
ANNEX 3	SOVEREIGN MACROECONOMIC ANALYSIS
ANNEX 4	PROJECT IMPLEMENTATION
ANNEX 5	OTHER IFIs INITIATIVES IN THE REGION

## ANNEX 1 – SOUTHERN OASES AND GOVERNORATES

The Project area is located in the southern oases of Tunisia, which covers 0.3 per cent of the country's area and is home to about 10 per cent of the country's population. There are about 210 oases in the South, comprising about 9 per cent of Tunisia's total irrigated area, and they are distributed across the governorates of Kébili (58 per cent), Tozeur (21 per cent), Gabès (16 per cent) and Gafsa (5 per cent). In the region's desert environment, the oases support rich biodiversity through their microclimate, and constitute crucial agricultural lands, which are the primary source of income and employment in the region. Irrigated agriculture comprises 10 per cent of Tunisian GDP, and it is the backbone of the economy in the Project area, providing jobs to 35 per cent of the working population.

**Map of Project area:**



[REDACTED]

## **ANNEX 2 – PROJECT DESCRIPTION**

The Project's preliminary capex programme requested by MAHRF consisted of the rehabilitation or replacement of 52 deep boreholes irrigating 37 oases over 3,600 ha in the four southern governorates of Gabes, Gafsa, Kebili and Tozeur. [REDACTED]

## **ANNEX 3 – SOVEREIGN MACROECONOMIC ANALYSIS**

### **Highlights**

The economy contracted significantly in 2020 and is expected to partially recover in 2021. The Covid-19 crisis and related containment measures led to higher unemployment and rising fiscal deficits, but inflation has been slowing down, foreign exchange reserves are up and the exchange rate is stable.

The authorities have responded to the crisis with a wide range of measures [REDACTED].

## ANNEX 4 – PROJECT IMPLEMENTATION

### Procurement classification – *Public sovereign* [REDACTED]

#### Project implementation arrangements

The Project Entity has long-standing experience in implementation of IFIs financed projects, but it is the first time that the Ministry will implement a project funded by EBRD. The Project will be managed by a Project Implementation Unit (hereafter PIU) yet to be appointed. The PIU will have a certain degree of autonomy in managing the Project. The PIU members will be selected from MAHRF and CRDAs' personnel according to strict qualifications agreed with the Bank [REDACTED] This approach will support the effective procurement and implementation of the Project.

While the procurement processes will be carried by the PIU, the day to day administration of works contracts implementation will most likely be delegated to CRDAs [REDACTED]. The consultants shall support, on the one side, the PIU in project management: planning and procurement process up to contracts award and, on the other side, the CRDAs in works supervision.

#### Procurement arrangements

The loan proceeds are envisaged to be used for (i) design and build of boreholes, decommissioning of boreholes and replacement or rehabilitation of borehole heads; and (ii) irrigation and drainage networks' rehabilitation and design and build of associated hydraulic infrastructure. The current procurement strategy envisages the use of Design and Build Contracts (under Yellow FIDIC Book Conditions of Contracts). [REDACTED]

This strategy aims at attracting large companies with design experience and capacity to provide quality assurance on materials and workmanship. The PIU support consultant shall enhance the market awareness and set up qualification requirements that encourage competition.

The Project works and consultancy services, financed from the Bank's loan, will be procured following open competitive tendering procedure in accordance with the requirements of the Bank's Procurement Policies and Rules ("PP&R") for public sector operations.

EBRD procurement team has offered the use of EBRD Client e-Procurement Platform (ECEPP), since ECEPP use is mandatory for all projects from January 2020. A first presentation was delivered to the Ministry along with presentation of the PP&R. If necessary, the Bank will provide another training on ECEPP. [REDACTED]

All consultancy contracts, both loan and TC funded, will be procured through open competitive selection process in accordance with the Bank's PP&R.



## **ANNEX 5 – OTHER IFIs INITIATIVES IN THE REGION**

IFIs active in the field of water resource management in the Southern Tunisia are the World Bank, the African Development Bank, the Agence Française de Développement (“**AFD**”), KFW, and the Japan Bank for International Cooperation. The International Fund for Agricultural Development (“**IFAD**”) is also an active international development actor. MCC is also aiming to start operations in the region in near future.

IFIs are implementing and/or scoping a variety of projects aligned to the continuous efforts of the GoT towards the reform of the water sector, in particular with regard to modernisation and rehabilitation of large irrigated areas, as well as drinking water security, flood control, dam building, and water sector strategy development.  
[REDACTED]