



## 1. Project Data

<b>Project ID</b> P132157	<b>Project Name</b> TN-DELP Oases Ecosystems and Livelihoods	
<b>Country</b> Tunisia	<b>Practice Area(Lead)</b> Environment, Natural Resources & the Blue Economy	
<b>L/C/TF Number(s)</b> TF-17362	<b>Closing Date (Original)</b> 30-Nov-2019	<b>Total Project Cost (USD)</b> 5,758,522.45
<b>Bank Approval Date</b> 11-Jun-2014	<b>Closing Date (Actual)</b> 30-Nov-2019	
	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>
Original Commitment	5,760,730.00	5,760,730.00
Revised Commitment	5,760,730.00	5,758,522.45
Actual	5,758,522.45	5,758,522.45

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## 2. Project Objectives and Components

### a. Objectives

According to the Project Appraisal Document (PAD) (p. vii) and the Financing Agreement of August 4, 2014 (p. 4) the Project Development Objective/Global Environmental Objective was “to improve sustainable natural resources management and promote livelihoods diversification in the selected oases”.

### b. Were the project objectives/key associated outcome targets revised during implementation?



No

**c. Will a split evaluation be undertaken?**

No

**d. Components**

The project included three components:

**Component 1: Strengthening Capacities for Sustainable Management of Oasis Ecosystems (appraisal estimate US\$1.031 million, actual US\$1.033 million):** This component included three sub-components:

Sub-component 1.1: Action Plan for the national strategy for sustainable development of Tunisian oases.

The main activities were to include: i) preparation of the Action Plan of the national strategy for the sustainable development of the oases; ii) development and implementation of a communication strategy (to be funded by the Government); and iii) preparation of monographic profiles for each of the 210 Tunisian traditional oases, including status of wildlife and biodiversity, together with a Web-based Geographic Information System (GIS).

Sub-component 1.2: Strengthening the capacities of stakeholders: Capacity building activities were to include two types of activities: i) training and technical assistance for the benefit of local and national stakeholders on topics related to participatory approaches, biodiversity protection, environmental governance, Sustainable Land and Water Management (SLWM) techniques, and initiatives aimed at diversifying local livelihoods and preparing community-driven micro-projects; and ii) specific support to oasis biodiversity-related activities were to be carried out by the following national specialized institutions to be recruited as consultants: the National Bank of Genes (BNG), the Regional Research Center for Oasis Agriculture (CRRAO) in Deguache and Tozeur, and the Institute of Arid Regions (IRA) of Medenine.

Sub-component 1.3: Monitoring and evaluation of Project activities: This component was to finance the establishment of an M&E system.

**Component 2: Supporting the implementation of the Oasis Participatory Development Plans (PDPOs): (appraisal estimate US\$4.434 million, actual US\$4.431 million):** This component included two sub-components:

Sub-component 2.1: Community micro-projects in the area of the diversification of local livelihoods: The main objective of this subcomponent was to strengthen the management of oasis natural resources by scaling up Sustainable Land & Water Management (SLWM) and biodiversity conservation techniques. This sub-component was to finance micro-projects aimed at: i) protecting oases against flooding, sand invasion, and wild boars; ii) improving the productivity of agricultural activities and the oasis eco-systemic services by scaling up SLWM practices; and iii) restoring and protecting oasis biodiversity.

Sub-component 2.2: Community micro-projects in the area of the diversification of local livelihoods: Community micro-projects were to aim at promoting alternative farming and non-farming activities, generating income and improving living conditions, but also reducing pressure on natural resources and help improving the quality and the sustainability of these resources. Also, these community based micro-



projects were to enhance local craftsmanship know-how and support ovine fattening activities and beekeeping as well as preserve, protect and develop oases' cultural heritage and promote ecotourism.

**Component 3: Project Coordination and Management (appraisal estimate US\$294,900, actual US\$293,593):** This component was to finance the establishment and functioning of the Project Management Unit within the General Directorate for Environment and Quality of Life (DGEQV), of the Ministry of Equipment, Territorial Management, and Sustainable Development (METMSD). Through the provision of goods, consultants' services and training. It was to cover i) the equipment cost for the unit; ii) project audits; and iii) the incremental operating costs for the project.

#### e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

**Project Cost:** The project was estimated to cost US\$5.76 million; actual cost was US\$5.75 million.

**Financing:** The project was to be financed by a US\$5.76 million Trust Fund managed by the Bank of which US\$5.75 million disbursed.

**Borrower Contribution:** The Borrower was not to make any contributions according to ICR P.2 but PAD p. 9 states that Borrower was to make contributions.

**Dates:** The project was never restructured and closed on its original closing date of November 30, 2019.

### 3. Relevance of Objectives

#### Rationale

Tunisia oases cover over 40,000 hectares of land area. 10 percent of the country's population lives in those oases, which have been important for agricultural production and functioned as trade centers linking remote regions together. In Southern Tunisia, oases provide the main sources of employment and have significant socio-impact in supporting food security and livelihood diversification. Oases face several challenges due to accelerated degradation of natural resources, increased over-exploitation of groundwater by monoculture of commercial date agriculture and growing urban encroachment.

This project focused on traditional oases, which is characterized by old plantations, three layers of vegetated surface, high tree density and fragmented individual plantations of small average size, and low yields.

The project's objective was in line with the government's National Strategy for the Sustainable Development of Oases, which was approved in May 2014. According to the Bank team (June 11, 2020) the project contributed to elaborating a specific Action Plan (AP) for the implementation of the Strategy in all the Tunisian oases. In the six-targeted oases, the project supported the implementation of eligible activities identified in the AP, particularly in the areas of SLWM and livelihood diversification. Also, the Bank team stated while Tunisia's National Strategy for the Green Economy did not explicitly mention oases, it addressed key issues related to oasis areas and identified relevant priority sectors (such as organic



farming, waste management to create businesses and jobs, etc.) and key themes (public-private partnerships for eco-innovation, renewable energy, water saving, water recycling and recovery, etc.), which were relevant in the context of oasis development.

At appraisal, the project's objective was in line with the Bank's Interim Strategy Note (FY13-14) which focused on three areas: i) laying the foundation for renewed sustainable growth and job creation; ii) promoting social and economic inclusion; and iii) strengthening governance. Also, the project's objective was in line with the Bank's most recent Country Partnership Framework (FY16-20), including pillar two "reducing regional disparities" and pillar 3 "promoting increase social inclusion". Also, the project's objective supported the five strategic objectives on Biodiversity and Land degradation of the Global Environment Facility (GEF). Especially, the objectives "mainstream biodiversity conservation and sustainable use into production landscapes, seascapes and sectors" and "agriculture and rangeland systems".

Therefore, the relevance of objectives is rated High.

## **Rating**

High

## **4. Achievement of Objectives (Efficacy)**

### **OBJECTIVE 1**

#### **Objective**

To improve sustainable natural resources management in the selected oases

#### **Rationale**

The project's theory of change envisioned that project outputs such as developing and approving the national strategy for sustainable oases and its action plan, training of stakeholders and implementing their initiatives and promoting SLWM techniques scaled up through implementing community micro-projects would result in intermediate outcomes such as: i) improved enabling environment for oases management; ii) improved capacity of local stakeholders to develop, implement, and monitor their oases development plans, and iii) adoption of SLWM techniques by local farmers and communities. These intermediate outcomes were to result in improved sustainable natural resource management in the selected oases.

The following assumptions were made: i) key stakeholders are aware of the severity of the environmental problems faced by oasis communities; ii) the government is committed to identifying new paths for integrated and sustainable development of oases ecosystems; and iii) key national stakeholders are willing to address the lack of administrative and technical capacity of grass root institutions.

#### **Outputs:**

- The national strategy for sustainable development of Tunisian oases was validated by the project steering committee, achieving the target of being validated.



- Monographies of all traditional Tunisian oases, as well as the first Tunisian Oasis Atlas to document their environmental and economic potentials, were developed, achieving the target of monographic profiles for all oases being prepared. The ICR (p. 12) stated that these documents impacted the design of the project activities in the targeted oases and were critical for scaling up activities through the new Bank project.
- A communication plan and a related action plan were developed. Outputs included: i) creation and maintenance of a website to provide information on projects and activities; ii) use of key social networks for the dissemination of good practices; iii) broadcasting of videos or interviews on the radio or television; and iv) presentation of the project results at international meetings.
- More than 200 people, representing national, regional, and local institutions in target oases and surrounding oases participated in the development of six training modules. In total, capacity building initiatives benefited 280 national, regional, and local stakeholders.
- A total of 60 micro-projects were implemented in four different areas: i) plantation of palm and fruit trees; ii) rehabilitation/renovation of irrigation infrastructure; iii) protection against wild boars and integrated pest management; and iv) strengthening of the (GDA's) capacity.
- 5,056 farmers adopted sustainable land and water management (SLWM) practices, surpassing the target of 3,000 farmers.
- 32 local species were reintroduced in the selected oases, surpassing the original target of 20 species and the revised target of 30 species.

#### **Outcomes:**

- The project benefited 23,257 beneficiaries, surpassing the target of 18,000 beneficiaries. 33 percent of beneficiaries were female, not achieving the original target of 51 percent or the revised target of 35 percent. The ICR and the Bank team did not explain how the target percentages were derived.
- Land area where sustainable land management practices were adopted reached 900 hectares, exceeding the target of 700 hectares.
- According to the ICR (p. 15) the project also generated not easily quantifiable benefits such as: i) strengthening the role and capacity of the GDAs resulting in an increase of members of 20 per GDA (before project start) to 300 members per GDA; ii) before project implementation most GDAs were indebted. Their financial situation improved through the project due to membership fees paid by new members and by renting out the agricultural equipment (tractors, mechanical shovels, phytosanitary equipment) that GDAs had received from the project.
- 377 clients adopted an improved agricultural technology, which had been promoted by the project, surpassing the target of 200 clients. 35.5 percent of these clients were female, achieving the target of 35.5 percent. However, both, the ICR and the Bank team did not explain how this percentage was derived.

**Rating**  
Substantial



## **OBJECTIVE 2**

### **Objective**

To promote livelihoods diversification in the selected oases

### **Rationale**

The project's theory of change envisioned that project outputs such as implementing promoted alternative livelihood micro-projects was to result in the intermediate outcome of improved community members participation in managing their eco-systems. This was to result in the objective of promoting livelihood diversification in the selected oases.

### **Outputs:**

- A total of 59 micro-projects were implemented in four main areas: i) income-generating activities; ii) improvement of living conditions; iii) alternative economic activities for youth; and iv) cultural ecotourism. The ICR did not provide any target.
- 25 technologies were demonstrated in the project areas, surpassing the target of 20 technologies.
- The number of biodiversity tracking tools being completed increased from six tools in 2014 to 18 tools in 2019, achieving the target.
- The number of land degradation tracking tools being completed increased from six in 2014 to 18 in 2019, achieving the target of 18 tools.
- 150 cultivars were produced, multiplied and distributed, surpassing the original target of 10 cultivars and the revised target of 70 cultivars. Given that the achievement of this indicator was 15 times higher than its original target and more than twice as high as the revised target, it is questionable if the targets were set too low and were not sufficiently ambitious.

### **Outcomes:**

- 47.2 percent of households adopted diversified activities as a result of the project, surpassing the target of 30 percent.

### **Rating**

Substantial

## **OVERALL EFFICACY**

### **Rationale**

Both objectives were Substantially achieved.

### **Overall Efficacy Rating**



Substantial

## 5. Efficiency

### Economic Efficiency:

The PAD (p. 20) included a Cost Benefit Analysis which made the following assumptions: i) about 5 percent of the households covered by the project were to benefit from project activities in year 1, with the same consistent growth rate in the following years; ii) revenues from agriculture and livestock and other diversified activities were to be expected to increase at the same rate over a period of 10 years; iii) the project's results were to be affected by various risks that are inherent to its implementation. The PAD did not define which risks.

The PAD identified the following benefits: Sustainable Land & Water Management (SWLM) benefits were expected to increase by value added per hectare due to: i) costs savings (in particular irrigation costs savings); ii) yield improvement (new plantations and training); and iii) price increases (due to quality improvements). A 'lag' of five years was considered between the initial investments and the full achievement of the benefits of the project.

Total Oasis Participatory Development Plan (PDPO) costs related to SLWM were incorporated on an annual basis for each oasis (costs related to heritage and tourism activities were not taken into consideration). Additional costs of maintenance of initial SLWM, equivalent to 3 percent of total investments, were included in the computation of total costs.

The analysis estimated an Internal Rate of Return (IRR) of 14.7 percent. However, the PAD and the Bank team did not state the discount rate that was used for this analysis.

According to the ICR (p. 15) an ex-post economic analysis was conducted as part of the preparation for the upcoming Sustainable Oasis Landscapes Management project, to assess the impact of this project's activities on local production systems. The analysis used the same assumptions as the PAD. The analysis calculated an ex-post Net Present Value (NPV) of US\$22 million and an overall Economic Rate of Return (ERR) of 22 percent at a discount rate of 6 percent.

This indicates, that the project was a worthwhile investment.

### Operational Efficiency:

The project closed on its original closing date and did not require any extensions. According to the ICR, the project did not experience any major delays.

Taking everything together, the project's overall Efficacy rating is Substantial.

## Efficiency Rating

High



a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

\* Refers to percent of total project cost for which ERR/FRR was calculated.

## 6. Outcome

The relevance of objective was rated High. Achievement of both objectives was Substantial, given that while impressive in terms of presumed benefits, there are clear questions around the data robustness for the outcomes. Efficiency is rated High. Overall, the project's outcome rating is therefore Satisfactory.

### a. Outcome Rating

Satisfactory

## 7. Risk to Development Outcome

The potential risks to development outcome can be classified into the following broad categories:

**Political/Financial:** According to the ICR (p. 23) the government requested the Bank to continue its engagement. The project will be followed by a new Bank oasis project (Sustainable Oasis Landscape Management - P169955; financing of US\$50 million; negotiations ongoing), which aims to scale up the approach to all Tunisian oases. Therefore, the outcomes achieved under this project are likely to be sustained. However, Tunisia is in a volatile economic and political situation, which poses a risk.

**Technical:** According to the ICR (p. 17) the project strengthened the collaboration between non-state institutions by building capacity and consolidating synergies. Also, collaboration between ministries was strengthened and the capacity of GDAs and Civil Society Organizations was strengthened through leadership training, awareness-raising activities for members etc. This might have a positive impact on the sustainability of the project outcomes. However, the Bank team stated (June 10, 2020) that the setting up of communes in rural areas is still in its beginning. The communal authorities know very little about their new responsibilities and do not always have the human and financial resources and capabilities to fulfill their new roles.

**Environmental:** Climate change related impacts will continue to negatively impact the sustainability of oases. Therefore, further investments will be critical.



## 8. Assessment of Bank Performance

### a. Quality-at-Entry

According to the ICR (p. 22) the project design included lessons learned from international and national experience in oasis management. The Bank team (June 11, 2020) stated that these lessons included the importance of the participation of local communities in natural resource management and sound diagnostic studies and assessments and the nexus between conservation and development.

Also, the project was built on a diagnostic assessment, which assessed local socio-economic conditions, poverty and household vulnerability and the identification of priority activities in a limited number of oases representative of the variety of Tunisian oasis ecosystems.

The ICR (p. 18) stated that potential stakeholders were appropriately identified and public consultations were conducted. However, the role of participating institutions was not clearly identified, which resulted in administrative bottlenecks.

The Bank team identified the following risks as Substantial: i) the political situation of the country, mainly because of policies not fully satisfied or contradictory aspirations, and political tensions being revived in view of the upcoming elections; ii) limited participation of some social categories of selected communities, particularly the most marginal ones in planning and implementing of oases activities; iii) degree of ownership of project investments by local communities and the private sector and availability of resources after project closure; iv) lengthy approval processes by ministerial committees and controllers as well as limited availability of General Directorate for Environment and Quality of Life (DGEQV) and PCU procurement staff hindering project preparation and implementation; and v) lack of skilled staff with financial management responsibilities in some GDAs. According to the Bank team (June 11, 2020) the Bank's mitigation measures were adequate.

During project preparation numerous state actors were identified, which were supposed to be fully involved in the implementation of the project. However, according to the Bank team (June 11, 2020) initially, their role had not been clearly defined, such as responsibilities and reporting structure, which resulted in administrative bottlenecks. However, the Project Implementation Unit (PIU) addressed these issues efficiently and in a timely manner.

The Results Framework was only adequate (see section 9a for more details) and prevented more clarity in measuring the project's achievements.

**Quality-at-Entry Rating**  
Moderately Satisfactory

### b. Quality of supervision

According to the ICR (p. 22) the Bank team conducted 11 supervision missions on a bi-annual basis and continuously provided close supervision on technical, monitoring, and fiduciary aspects. The same Task



Team Leader prepared and implemented the project. Also, the ICR stated that the Borrower commented that the Bank performed its M&E function well and provided the PIU with useful recommendations.

The ICR (p. 21) stated that the project did not encounter any procurement or financial management related implementation issues. However, the Bank might have been able to play a stronger supervisory role and provided more support in regards to lengthy processes of recruitment and operationalization of the members of the project management unit (especially at local level).

### **Quality of Supervision Rating**

Satisfactory

### **Overall Bank Performance Rating**

Moderately Satisfactory

## **9. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

The objective was simple and clearly specified. The project's theory of change and how project activities were to result in outputs and then in outcomes was sound and reflected in the Results Framework. Also, the indicators encompassed all outcomes of the PDO statement and the intermediate outcome indicators were adequate to capture the contribution of the project's components towards achieving the objective.

However, five out of six PDO indicators and five out of ten intermediate outcome indicators exceeded their targets. Moreover, the majority of indicators lacked a baseline, making it difficult to assess if the indicators' targets were appropriate. These considerations suggest that the targets were set too low, at least initially, before the MTR (see the second para below under M&E Implementation.)

According to the PAD (p. 17) at the national level, the PIU was to lead all aspects of monitoring and evaluation and provide operational tools and instruments for data collection at local levels.

The ICR (p. 20) stated that the M&E system did not trigger early warnings for administrative delays related to the lengthy processes of recruitment and operationalization of the members of the project management unit (especially at local level). At the beginning, other delays were related to the relatively new process of participatory planning, approval and implementation of sub-projects.

### **b. M&E Implementation**

According to the Bank team (June 11, 2020) before the Mid-Term Review (MTR), data was collected, but not analyzed and processed in an optimal manner. The MTR contributed to adjusting and adapting the system and revising some indicators. After the MTR data was collected systematically at the local level, assessed by the project team and validated through supervision missions and field visits. The project developed a public database that included all project activities and indicators and provided the



opportunity to assess implementation progress. Progress reports were submitted to the Bank on a regular basis.

During the MTR targets of two indicators were increased (number of local species reintroduced in selected oasis was increased from 20 to 30 species; and number of cultivars being produced, multiplied and distributed was increased from 10 to 70) and the target of one indicator was decreased (percentage of women benefitting from the project was reduced from 51 percent to 35 percent). According to the Bank team (June 11, 2020) it was agreed that a restructuring of the project was not necessary given the simple changes. Also, the Bank team stated that all the indicators were consistently measured and reported through the effective involvement of all the stakeholders (at different levels) in collecting, processing and reporting.

### **c. M&E Utilization**

According to the ICR (p. 20) the Results Framework Monitoring database was used to inform project management. Project data was also used to identify implementation shortcomings, redirect investments, and coordinate action plans with counterparts to improve implementation. The Bank team stated (June 11, 2020) that individual databases for each oasis helped to identify shortcomings such as imprecise demographic data, inadequate assessment of the actual economic role of women in agricultural and handicraft activities, the scale of land and biodiversity degradation. etc.

Owing to the significant weaknesses identified in design and implementation, overall M&E Quality is rated Modest.

### **M&E Quality Rating**

Modest

## **10. Other Issues**

### **a. Safeguards**

The project was classified as category B and triggered the Bank's safeguards policy on Environmental Assessment OP/BP 4.01, Natural Habitats (OP/BP 4.04), Physical Cultural Resources (OP/BP 4.11), Involuntary Resettlement OP/BP 4.12.

According to the ICR (p. 21) the project prepared an Environmental and Social Management Framework (ESMF) and Environmental Social Management Plans were prepared for all sub-projects. The ESMF included mitigation measures to minimize or avoid damage to natural habitats. Also, a Resettlement Policy Framework (RFP) was prepared and was found acceptable to the Bank.



The project organized several trainings for local project staff, representatives of the Agricultural Development Groups (GDAs) and regional representatives, regional environmental directorates and on a few occasions for heads of sub-projects.

The ICR (p. 21) stated that there were no reports of accidents related to project activities. Also, grievances submitted from people affected by the project were registered and resolved. Furthermore, according to the ICR, safeguard compliance was highly satisfactory throughout project implementation.

**b. Fiduciary Compliance**

**Procurement:**

The GDAs performed the project’s procurement in the six different oases. According to the ICR (p. 21) the project did not experience any procurement related issues and 300 contracts were awarded and completed and liquidated before the project closed.

**Financial Management:**

According to the ICR (p. 20) the project’s financial management was rated Satisfactory throughout project implementation. Also, the project complied with all planned external audits and the all audit reports were unqualified. The project experienced some delays in the submission of audit reports during the first two years of project implementation due to Tunisia’s Supreme Audit Institution being understaffed. However, this issue improved and audits were submitted in a timely manner afterwards.

The Bank team stated (June 11, 2020) that the project complied with the Bank’s financial covenants.

**c. Unintended impacts (Positive or Negative)**

The ICR (p. 17) states that the project contributed to improving female participation in community and economic activities through awareness rising initiatives. Also, women’s associations were involved in project activities, especially in income-generating activities such as beekeeping, poultry farming, handicrafts, sewing, weaving and activities related to oasis ecotourism. However, the ICR does not provide systematic evidence.

**d. Other**

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**11. Ratings**

Ratings	ICR	IEG	Reason for Disagreements/Comment
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Outcome	Highly Satisfactory	Satisfactory	There were minor shortcomings in the level of achievement for efficacy and the evidence base supporting these achievements.
Bank Performance	Satisfactory	Moderately Satisfactory	There were limitations with quality at entry
Quality of M&E	Substantial	Modest	Owing to significant weaknesses identified in design and implementation, overall M&E Quality is rated Modest
Quality of ICR	---	Substantial	

## 12. Lessons

The ICR (p. 23-24) included several lessons learned which were adapted by IEG:

- **Combining adaptation measures to strengthen oases’ resilience and economic measures to strengthen people’s resilience are critical for sustainable biodiversity protection and conservation.** This project aimed at reducing poverty through micro-projects and supporting alternative livelihoods while also protecting and preserving a variety of species and habitats. This could have a positive impact on the project outcomes' sustainability.
- **Building capacity and raising awareness is critical for the sustainability of newly introduced innovative agricultural techniques and practices.** In this project, local municipalities and grass-roots organizations were involved in planning and implementing activities resulting in a higher chance of project outcomes being sustainable and creating conditions for scaling up activities at national and regional levels.

## 13. Assessment Recommended?

No

## 14. Comments on Quality of ICR

The ICR is concise, includes an Economic analysis and useful lessons learned. However, the ICR could expand on any implementing challenges and how they were solved. In addition, there is a lack of key linkages between the results, the claimed outcomes and the evidence required to support these claims. Having said that, the performance narrative is clear and thus the ICR quality is rated Substantial.

### a. Quality of ICR Rating



Substantial