Final evaluation of the project “Adaptive management and monitoring of the Maghreb’s oases systems”
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The evaluation team also thanks Mr Abdelmajid El Idrissi Ammari, FAO project coordinator for oases in FAO Morocco and Mr Noureddine Nasr, former project LTO.

The evaluation was carried out with the invaluable assistance of the FAO staff whose insight, knowledge, advice and comments made this evaluation possible.

The evaluation benefited from the inputs of many other stakeholders, including government officers, associations dedicated to oasis management, Associative Network for the Sustainable Development of Oases (RADDIO) and its network of non-governmental organizations (NGOs) (Association for the Safeguard of the Oasis of Chenini [ASOC], Oasis Ferkla Association for Environment and Heritage [AOFEP], Tenmiya), research centres and the private sector. Their contributions were critical to the team’s work and are deeply appreciated.
<table>
<thead>
<tr>
<th>Acronyms and abbreviations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMU</td>
<td>Arab Maghreb Union</td>
</tr>
<tr>
<td>ANDZOA</td>
<td>National Agency for the Development of the Oasian Areas and the Argan</td>
</tr>
<tr>
<td>AOFEP</td>
<td>Oasis Ferkla Association for Environment and Heritage</td>
</tr>
<tr>
<td>ASOC</td>
<td>Association for the Safeguard of the Oasis of Chenini</td>
</tr>
<tr>
<td>CARI</td>
<td>Centre of International Actions and Achievements</td>
</tr>
<tr>
<td>CNTC</td>
<td>National Centre for Cartography and Remote Sensing</td>
</tr>
<tr>
<td>CRRAO</td>
<td>Regional Centre of Oasis Agriculture Research</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil society organization</td>
</tr>
<tr>
<td>DAT</td>
<td>Directorate of Territorial Planning</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographical Information System</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and evaluation</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
</tr>
<tr>
<td>ORMVA</td>
<td>Regional Office for Agricultural Development</td>
</tr>
<tr>
<td>ProDoc</td>
<td>Project document</td>
</tr>
<tr>
<td>RADDO</td>
<td>Associative Network for the Sustainable Development of Oases</td>
</tr>
<tr>
<td>UNCCD</td>
<td>United Nations Convention to Combat Desertification</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
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</table>
Executive summary

1. The project "Adaptive Management and Monitoring of the Maghreb’s Oases Systems (MSP) GCP/SNE/002/GFF", financed with USD 1.7 million from GEF, had a total budget of USD 8 million. It was implemented by FAO in Tunisia, Morocco and Mauritania under the coordination of the FAO Regional Office in Tunis from May 2016 to December 2019.

2. The project aimed at improving, expanding and sustaining the adaptive management and monitoring of oasis systems in the Maghreb. It was built around four components:
   i. Component 1: Improving institutional capacity to collect, manage and monitor trends and impacts of land degradation.
   ii. Component 2: Selection, characterisation and sharing of best practices for adaptive management of oasis ecosystems within the network.
   iii. Component 3: Increased awareness of decision-makers, communities, associations and networks on oasis ecosystems and adaptive management tools.
   iv. Component 4: Monitoring and evaluation.

3. The final evaluation covered all the activities implemented. It was carried out one month before the end of the project, i.e. from 4 to 15 November 2019 by a team of two experts. The objective of the evaluation was twofold: (i) On the one hand, it aimed at assessing objectively the implementation of the project in the three countries and reporting on the main results achieved by the Governments of Mauritania, Morocco and Tunisia (in particular the ministries and state structures involved, which are the main focal points at national level), GEF, which is the project’s donor, FAO as the executing agency, as well as the implementing partner non-governmental organizations (NGOs)/associations and the beneficiaries. (ii) On the other hand, the evaluation aimed at drawing lessons from this experience to contribute to the development of the adaptive management and monitoring approach of oases in Mauritania, Morocco, and Tunisia and at the regional level, and to inform future interventions targeting sustainable management of oases.

4. This summary presents the main findings, conclusions and recommendations of the evaluation.

Main findings

5. **Relevance:** The overall relevance of the project is considered highly satisfactory (HS), as its design took into account all the foundations of the current policy and strategies of GEF, FAO and the three countries concerned, in particular, in the three areas selected by the project. Thus, the project is relevant to the areas of intervention and to its main priority: oases. It is also relevant in terms of its working approach, which takes into account the local, national, regional and even international levels.

6. In the three countries, the project is consistent with the national strategic documents (see details herein). Moreover, the choice of oases is justified for two reasons: these ecosystems are experiencing a multitude of problems (intensive exploitation, climate change, land, social, economic, etc. crises, leading to rapid degradation of biodiversity and increased marginalisation of these territories); and, oases are affected by political marginalisation. This lack of interest is largely linked to the lack of monitoring and information, which makes
it difficult to take decisions and implement coherent and coordinated responses among the many stakeholders. Thus, the relevance of the project lies in the fact that it simultaneously tackles several existing challenges in oasis management through the implementation of a geographic information system. This generates real-time information on oases and thus, leading to effective decision-making for their proper management. Moreover, it defines practices that best ensure the sustainable management of oases, as well as advocacy and awareness-raising actions for key stakeholders at all levels of decision-making, at both national and international levels.

7. The participatory approach adopted by the project has enabled technical cooperation between the public institutions of the three countries and various other stakeholders, including civil society organisations in the Maghreb. This allowed the project to:
   i. have an overview of the state of natural resources and promote relevant knowledge sharing and the pooling of good practices in oasis monitoring and management;
   ii. establish and organise a partnership and a network of relationships constituting both a driving force for innovation, and a consolidated governance and promotion system for oases;
   iii. build the capacities of stakeholders involved in the monitoring and implementation of sustainable development approaches and processes. However, the evaluation noted the absence of certain key stakeholders such as decentralised local authorities or universities working on rural development.

8. **Effectiveness:** It should be noted that, at the end of the project, most of the direct objectives were achieved, namely: the development of a tool for collecting and processing oasis data that can be used as a decision-making tool; the identification of good practices; and the development of a consolidated regional and country-specific strategy. The effectiveness of the project is therefore rated as satisfactory (S), as its few minor shortcomings can be attributed to the seven-month delay in project implementation.

9. Information and decision support tools in the form of Geographical Information Systems (GIS) have been developed to enable development partners to adjust their actions with a view to good governance of oasis systems in the long term and the harmonisation of data and geospatial analysis between countries. But it is worth noting that each of these countries requires specific efforts to finalise the input of data into the GIS and to output queries in real time in order to effectively respond to the demands of stakeholders, so as to ensure the adaptive management of oases as foreseen by the project.

10. With regard to the identification, characterisation and sharing of good practices related to adaptive management of oasis systems, the project validated 33 practices at the regional level out of the 61 identified, including some practices specific to each country, 13 for Tunisia, 10 for Mauritania and 10 for Morocco. The sharing and dissemination of good practices is not fully achieved (the evaluation team could not verify and was not aware of any dissemination in Mauritania, for example).

11. With regard to awareness-raising and advocacy, a set of effective and appropriate tools – specific to sustainable oasis management and adaptable by country – has been developed to ensure that oasis ecosystem issues are taken into account at the national and international levels. Although they have not yet been validated by the project, these tools exist at the regional and national levels, and serve national and international civil society.
According to the evaluation, these tools are not yet sufficiently used to achieve the expected outcome.

12. **Efficiency:** The efficiency of the project, its execution and more specifically the overall quality of implementation, are rated as moderately satisfactory (MS). The project’s implementation was delayed by 7 months. Despite the project extension, at the time of the evaluation – which took place less than one month before the end of the project – the project activities were not fully completed. Also, at the level of each country, no technical monitoring committee was set up.

13. The project was a good example of synergy and collaboration between key institutional stakeholders in charge of rural development (Agriculture, Livestock, Environment, and Water) and stakeholders of civil society, research and communities living in the oases. Within the framework of GIS implementation, the participatory approach favoured the identification of 71 indicators between the countries, including indicators specific to each country (61 common indicators for Morocco, Tunisia and Mauritania and ten indicators specific to Tunisia and Morocco). The same approach was used during the identification, characterisation and validation of good practices. Conversely, Component 3, under the leadership of Centre of International Actions and Achievements (CARI) – according to the stakeholders implementing the project and especially the focal points – experienced few synergies between stakeholders, despite the few workshops organised to train them in the elaboration of advocacy documents and the validation of a consolidated strategy.

14. Very few partnerships have been signed between FAO and its partners; in fact, the project signed 5 letters of agreement (LoAs): 3 at the regional level with CARI/Associative Network for the Sustainable Development of Oases (RADO) and 2 at the national level (Tunisia) with CRRAO. It should be mentioned that 40 institutions are involved in the three components of the project with more than 700 people. Fortunately, the project has identified a “designated focal point” for each partner facilitating information exchange with FAO.

15. **Sustainability:** The project has laid the foundations and actions that would serve its institutional sustainability as well as that of its actions after the project’s end. Despite these institutional and technical foundations, the evaluation noted a glaring lack of guarantees regarding the project’s financial and political sustainability. Nevertheless, the evaluation has rated the sustainability as satisfactory, i.e. the risks are moderately probable.

16. The evaluation found that the project did not put in place a participatory monitoring-evaluation strategy that takes into account all project stakeholders. The monitoring-evaluation component was carried out solely by the FAO team. As a result, data collection involving all project stakeholders to monitor indicators was not carried out systematically. For the evaluation, this aspect was unsatisfactory (U) because no monitoring and evaluation tool adapted to the project was developed and the classic FAO monitoring and evaluation system did not allow the monitoring of all the project indicators, nor the involvement of other key stakeholders.

17. **Gender issues:** In the three countries, the project is line with major national gender policies. Women’s participation in the project could have been improved, if a differentiated analysis of the roles of women and men in the management of oasis ecosystems been included during project design and development.
18. **Stakeholder engagement:** With regard to stakeholder engagement, the project was actually implemented by the co-financing and implementing partners. At the level of co-financing partners, CARI – which was identified during project design – also benefited from project funding by supervising RADDO and its LoAs as implementing partner. It should be mentioned that this dual status already existed in the ProDoc jointly validated by GEF and the three beneficiary countries of the project. In addition, part of the project funding received by CARI was dedicated to RADDO’s NGOs. Thus, RADDO was also an executing partner of the project through CARI. This institutional set-up reflects that of the ProDoc. However, according to the evaluation team, from a good governance perspective, if the project had dealt directly with RADDO’s NGOs on the basis of a decision of the steering committee (SC), the misunderstanding that this institutional set-up, validated by the ProDoc, gave rise to, would not have occurred. Therefore, stakeholder engagement has been rated as moderately satisfactory (MS).

19. **Knowledge management:** In terms of knowledge management, the project has produced a list of indicators for GIS data collection, a good practice document listing 10 specific good practices selected in Morocco, 10 from Mauritania and 13 from Tunisia. At the advocacy level, in addition to the consolidated advocacy strategy at regional and country level, there was one oasis declaration, one film under validation by FAO, five position papers and five information notes. All these productions are important assets for knowledge management. Beyond this identification, it should be noted the absence of a strategy for knowledge management, and the non-involvement of state services with their regional mandate in terms of extension: involving state extension services could have improved the sustainability of the project’s actions as these services operate continuously under national budgets.

**Conclusions**

**Conclusion 1. Relevance:** The project remained relevant throughout its implementation in terms of the themes addressed, the expected results, the stakeholders identified, the project area and its coherence with government, FAO and GEF strategies.

20. The project relating to the adaptive management and monitoring of oasis systems in the Maghreb responds to the needs of the target countries (Morocco, Mauritania, Tunisia), and the stakeholders identified since its design phase and throughout its implementation. According to the evaluation team, the project remained relevant in: the choice of oases as the main theme; the choice of pilot sites to test the decision-support tools; the three expected results and the overall implementation approach with a regional vision at the Maghreb level; and the reliance on civil society organizations (CSOs) to implement two project components.

**Conclusion 2. Effectiveness:** The project aimed at improving, expanding and sustaining the adaptive management and monitoring of oasis systems in the Maghreb. In terms of concrete achievements, all project components were implemented, except for the monitoring-evaluation component, which had heterogeneous results.

21. For example, for component 1, the project aimed at providing a comprehensive and systematic response to the particularly complex issue of oases by collecting and entering all oasis data into a GIS platform; this to ensure full-scale monitoring and provide timely responses. Focusing on this first component, the evaluation found that, in relation to the time and means available, the project quickly circumscribed its intervention geographically
(2 sites per country). To date, the project has not completed the action to operationalise the decision support tools (which are the GIS of the three countries), although in Tunisia, significant and satisfactory progress has been noted. There is probably an imbalance between the project’s ambitions and its financial means (see Conclusion 3).

Conclusion 3. Efficiency: There is probably an imbalance between the project’s ambitions and its financial means. The analysis of the objective and results by the evaluation team, indicates that it was an ambitious project in view of the total amount of the project.

22. The efficiency of the project, its execution and more specifically the overall quality of project implementation and adaptive management (implementing agency), have been rated by the evaluation team as moderately satisfactory (MS). The project management bodies that were supposed to improve the overall quality of implementation, were not functional at country level. This did not allow for an adaptive approach to the project although the SC was functional at regional level. The ambitions of the project (full-scale monitoring of the oases through the project GIS) over a two-year period with an FAO budget of USD 1 726 484 and despite contributions from each of the governments (see Appendix 2), are at odds with what the evaluation team considers realistic.

Conclusion 4. Monitoring and evaluation: No monitoring and evaluation of the project has been carried out at the national level. The project, with its multi-stakeholder nature, designed an appropriate monitoring and evaluation system. Regrettably, the monitoring-evaluation component was solely carried out by the FAO team. This classic monitoring and evaluation (M&E) system could not play the role assigned to the technical monitoring committees at the national level, which unfortunately were not set up.

23. These M&E systems, initially planned by the project, would have improved the management of the project through proposals made by all the stakeholders involved in these project management bodies. At regional level, the evaluation noted the holding of 05 steering committees, exceeding project expectations. At the national level, the evaluation noted working sessions between the project focal points and their stakeholders.

Conclusion 5. Sustainability: Component 1 of the project was implemented by institutional stakeholders and Components 2 and 3, by national and international civil society. These two types of stakeholders together constitute an important basis for the sustainability of the project actions.

24. Beyond the commitments made, these stakeholders aim to use the achievements of the project and to develop them for the sustainable management of oases. With regard to sustainability, both socio-political and institutional, the management of oases has been entrusted to stable state institutions; this guarantees the likelihood of this sustainability. The same has been applied at the environmental level, where the project actions have rather contributed to strengthening environmental sustainability. Nevertheless, the financial sustainability of the project is not guaranteed; though at the time of the project evaluation new project initiatives were being formulated, none had yet secured the financial resources necessary to proceed with implementation.

Conclusion 6. Gender: The project included specific indicators for women, youth and men (same indicator, differentiated data collection) and the implementation team took them well into account. However, the evaluation highlighted the lack of differentiated analysis on the role of women and men in the management of oasis ecosystems. The project’s gender-
related indicators could have been strengthened through this differentiated analysis. Indeed, it would have led to more relevant actions, allowing for greater involvement of women and youth.

Conclusion 7. Stakeholder engagement: The project's stakeholders were well targeted at both regional and national levels with one exception: the project could have avoided CARI's dual status as co-financing and implementing partner, if the project had directly identified RADDOS's NGOs (as implementing partner) at the time of project design.

Conclusion 8. Knowledge management. The project has produced several documents relevant to knowledge management. However, some of these have not been sufficiently disseminated to ensure ownership by the direct beneficiaries.

25. These productions notwithstanding, national extension services would have better valorised all this knowledge within the framework of their national mandate, as these operate continuously within national budgets.

Recommendations

To FAO:

Recommendation 1. Introduce oasis data into FAOSTAT.

Recommendation 2. Establish bridges between projects under development.

To FAO and the GEF/FAO Unit:

Recommendation 3. Develop an effective exit strategy for the project.

26. All the project objectives are in progress: the expected impacts can only be achieved if all of them are met. This is why it is capital to develop during the course of the project a strategy to mobilise additional funding for: the assignment of tasks, the shared responsibility of services and beneficiaries, and the capitalisation, formalisation and communication of project actions. It would be desirable to let Arab Maghreb Union (AMU) or Sahara and Sahel Observatory (OSS) continue and take over the GIS work carried out to date in terms of its operationalisation and establishment in the decision-making bodies of the countries, of the popularisation of good practices and of advocacy.

Recommendation 4. Develop the operating accounts of expensive good practices.

To institutions hosting the GIS:

Recommendation 5. Set up a formal and binding data collection system to feed the GIS.

To the civil society involved in the project:

Recommendation 6. Promote good practices and advocacy documents within RADDOD and other civil society networks
### GEF Evaluation Criteria Assessment Table

<table>
<thead>
<tr>
<th>FAO - GEF Rating Scheme</th>
<th>Rating</th>
<th>Summary Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) Relevance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall relevance of the project.</td>
<td>HS</td>
<td>The project design took into account all the foundations of the current policy and strategies of GEF, FAO and the three countries concerned, in particular, in the three areas selected by the project. The project is relevant to the areas of intervention and to its main priority - oases. It is also relevant to its working approach, which takes into account the local, national, regional and even international levels.</td>
</tr>
<tr>
<td><strong>2) Effectiveness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall assessment of project results.</td>
<td>S</td>
<td>The project achieved almost all the expected outcomes at 03 operational components level. However, the GIS is not fully functional in the three countries, the BPs are not disseminated, and advocacy did not reach all the targets. Component 3 has not been implemented. The project aimed at improving, expanding and sustaining the adaptive management and monitoring of oasis systems in the Maghreb.</td>
</tr>
<tr>
<td>Outcome 1 - The building of institutional and technical capacities to harmonise and manage data, and carry out geospatial analysis for the monitoring and adaptive management of oases.</td>
<td>S</td>
<td>The three GIS are installed in the 03 countries and the staff are trained and available. The databases that are to feed the GIS are not fully completed and this may hamper requests for adaptive management of oases.</td>
</tr>
<tr>
<td>Outcome 2 - The identification, characterisation and sharing of good practices related to adaptive management of oasis systems.</td>
<td>S</td>
<td>Good practices have been identified and characterised but sharing and dissemination did not reach the expected level.</td>
</tr>
<tr>
<td>Outcome 3 - The development and implementation of an awareness and advocacy strategy on oasis systems as well as planning and decision support tools.</td>
<td>S</td>
<td>A consolidated advocacy strategy as well as some advocacy tools have been developed. Movie media is still awaited. Moreover, concrete advocacy actions remain mitigated at the country level. However, at international level, several advocacy actions are carried out.</td>
</tr>
<tr>
<td><strong>3) Efficiency, project implementation &amp; execution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall quality of project implementation &amp; adaptive management (implementing agency).</td>
<td>MS</td>
<td>The project management bodies that were supposed to improve the overall quality of implementation, were not functional at country level. This did not allow for an adaptive approach to the project although the SC was functional at regional level.</td>
</tr>
<tr>
<td>Quality of execution (executing agencies).</td>
<td>MS</td>
<td>The quality of execution was impaired by the fragmentation per component. It is true that the participatory approach per project component was preferred.</td>
</tr>
<tr>
<td>Efficiency (incl. cost effectiveness and timeliness).</td>
<td>MS</td>
<td>The effectiveness of the project is therefore rated as moderately satisfactory (MS), as the project was</td>
</tr>
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</table>
delayed by one year during its implementation. Despite the project extension, at the time of the evaluation – which took place less than one month after the end of the project – the project activities were not fully completed. Some of the uncompleted activities, such as the collection of data for the GIS database, contributed significantly to this rating. Indeed, because without a complete database, the GIS, the decision-making tool, would lack the insight to improve decision-making for the adaptive management of oases.

### 4) Factors affecting performance (M&E and stakeholder engagement)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall quality of M&amp;E.</td>
<td>U</td>
<td>No monitoring-evaluation tool has been developed, not to say implemented.</td>
</tr>
<tr>
<td>M&amp;E design at project start up.</td>
<td>U</td>
<td>No monitoring-evaluation tool has been developed; some guidelines were given at the beginning of the project.</td>
</tr>
<tr>
<td>M&amp;E plan implementation.</td>
<td>U</td>
<td>Because no monitoring and evaluation tool was developed or even implemented throughout the life of the project, the numerous SC meetings nevertheless validated the documents produced by the project and gave strategic orientations for the smooth running of the project. Furthermore, the evaluation found that the country focal points worked on a daily basis with each of the stakeholders.</td>
</tr>
</tbody>
</table>

### 5) Sustainability

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial resources</td>
<td>ML</td>
<td>Moderately unlikely (MU): significant risk, as no funding was secured at the time of the evaluation.</td>
</tr>
<tr>
<td>Socio-political</td>
<td>ML</td>
<td>Moderately Likely (ML): moderate risk.</td>
</tr>
<tr>
<td>Institutional framework and governance</td>
<td>ML</td>
<td>Moderately Likely (ML): moderate risk.</td>
</tr>
<tr>
<td>Environmental</td>
<td>L</td>
<td>Likely (L): negligible risk to sustainability.</td>
</tr>
</tbody>
</table>

### 6) Stakeholder engagement

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall quality of stakeholder engagement</td>
<td>MS</td>
<td>Conclusion 7: Stakeholder engagement: Project stakeholders were well targeted at both regional and national levels. This could have avoided CARI’s dual status as co-financing and implementing partner, if the project had directly identified RADDOS’s NGOs (as implementing partner) at the time of project design.</td>
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</tbody>
</table>
GEF Evaluation Criteria: Rating scales

<table>
<thead>
<tr>
<th>Ratings for outcomes, effectiveness, efficiency, monitoring and evaluation and surveys</th>
<th>Sustainability ratings</th>
<th>Relevance ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 highly satisfactory (HS): No shortcomings</td>
<td>4 likely (L): negligible risk to sustainability</td>
<td>2 relevant (R)</td>
</tr>
<tr>
<td>5 satisfactory (S): Minor shortcomings</td>
<td>3 moderately likely (ML): moderate risk</td>
<td>1 not relevant (NR)</td>
</tr>
<tr>
<td>4 moderately satisfactory (MS)</td>
<td>2 moderately unlikely (MU): significant risks</td>
<td>Impact ratings:</td>
</tr>
<tr>
<td>3 moderately unsatisfactory (MU): significant shortcomings</td>
<td>1 unlikely (I): serious risk</td>
<td>3 satisfactory (S)</td>
</tr>
<tr>
<td>2 unsatisfactory (U): major problems</td>
<td></td>
<td>2 minimal (M)</td>
</tr>
<tr>
<td>1 highly unsatisfactory (HU): serious Problems</td>
<td></td>
<td>1 negligible (N)</td>
</tr>
</tbody>
</table>

*Additional ratings, if and when necessary:*
- Not applicable (NA)
- Not evaluated (NE)
1. **Introduction**

1.1 **Purpose of the evaluation**

This evaluation seeks to support the project team, FAO technical staff, the government departments involved and beneficiaries to better appreciate the strengths and weaknesses of the project approach to date, so as to learn from the activities and modify where needed any similar projects. It aims at measuring the progress of the project, in terms of results achieved in relation to set objectives and in terms of the efficiency of its implementation.

1.2 **Structure of the report**

2. The evaluation report is structured as follows:

i. Chapter 1 presents: (1.1) the purpose of the evaluation, (1.2) the structure of the report, (1.3) the target audience, (1.4) the scope and objectives of the evaluation, (1.5) the methodology used, and (1.6) its limits;

ii. Chapter 2 provides an overview of the project with an emphasis on its context;

iii. Chapter 3 presents the results of the evaluation for the three countries, organised around the key evaluation questions;

iv. And, Chapter 4 presents the conclusions and recommendations of the evaluation.

1.3 **Target audience**

3. The primary audience and intended users of this evaluation include, but are not limited to:

i. FAO country offices in Morocco, Mauritania and Tunisia; the FAO Sub regional Office for North Africa; and divisions at FAO headquarters involved in the project: all can use the results of the evaluation in the implementation of future similar projects at country and global level;

ii. the Arab Magreb Union (AMU), which will use the results of this evaluation in the framework of the cooperation agreement co-signed by FAO and the AMU General Secretariat, to provide effective solutions to the challenges related to food supply and the development of agriculture and livestock in Maghreb countries. The three sectors that are part of the axes of cooperation between the two institutions are also present in the oasis ecosystems;

iii. the Governments of Morocco, Mauritania and Tunisia, and in particular the ministries involved in the management of oasis ecosystems, that will use the results of the assessment and lessons learned in other projects to improve, expand and sustain adaptive management and monitoring of oasis systems in the Maghreb;

iv. implementing partners, namely CARI-RADDO and its NGO partners, that will integrate the lessons learned into their own initiatives;

v. the donor, GEF, and other technical and financial partners with decision-making power on the development and financing of other sustainable oasis management projects.
1.4 **Scope and objectives of the evaluation**

4. The final evaluation covers all the activities implemented from May 2016 to November 2019. The evaluation took place one month before the end of the project. The geographical area covered by this evaluation is in the three project countries: Morocco, Tunisia and Mauritania. It concerns all the areas targeted by the project, including the two oases located in Mauritania which were not visited during the evaluation mission due to the few activities carried out there and to time constraints.

5. The objective of this evaluation was twofold:
   i. On the one hand, assess objectively and critically the implementation of the project in the three countries and report on the main results achieved by the Governments of Mauritania, Morocco and Tunisia (in particular the ministries and state structures involved, which are the main focal points at national level), GEF, which is the project’s donor, FAO as the executing agency, as well as the implementing partner NGOs/associations and the beneficiaries.
   ii. On the other hand, draw lessons from this experience to contribute to the development of the adaptive management and monitor approach of oases in Mauritania, Morocco, and Tunisia and at the regional level, and to inform future interventions targeting sustainable management of oases.

6. The team based its evaluation on the key questions presented in the terms of reference. The latter, and their sub-questions, guided the analysis conducted by the evaluation team (for the questions, see Box 1). The sub-questions were refined and completed during the initial phase of the evaluation and are presented in the evaluation matrix (Appendix 4), which also indicates the sources of information used. The evaluation questions correspond to one or more of the GEF evaluation criteria and were all examined during this evaluation.

7. There are six GEF criteria to be assessed and rated. They cover the objective of the evaluation, which is to analyse the project’s progress in terms of (i) Relevance, (ii) Effectiveness, (iii) Efficiency, (iv) Monitoring and evaluation, (v) Sustainability, and (vi) Stakeholder engagement.

8. Other information related to environmental and social protection measures, gender, co-financing, and the level of progress towards long-term impact, was also taken into account.
### Evaluation questions

<table>
<thead>
<tr>
<th>Relevance (assign a rating)</th>
<th>Were the project objectives consistent with operational programme strategies or GEF priority areas, country and FAO priorities? Was the project design appropriate to achieve the expected results?</th>
</tr>
</thead>
</table>
| **Effectiveness** (assign a rating) | To what extent does the actual outcome of the project correspond to the expected outcomes?  
To what extent is the project progressing towards the achievement of long-term impacts?  
To what extent have the project objectives been achieved? And unintended outcomes achieved?  
To what extent have environmental and social issues been taken into account in the design and implementation of the project?  
How were project risks identified and managed? |
| **Efficiency** (assign a rating) | To what extent has the project been implemented efficiently, particularly in terms of costs?  
To what extent did the implementing agents concretely fulfil their roles and responsibilities in the management and administration of the project?  
What were the concrete effects of co-financing? How did the decrease in co-financing or the higher than expected achievement affect project outcomes?  
Has the project adapted to changing conditions in order to improve the efficiency of its implementation?  
How effective was the capacity building of individuals, institutions and for an oasis-friendly environment? |
| **Monitoring and evaluation** | Was the monitoring and evaluation (M&E) system appropriate for the project?  
To what extent did the M&E plan prove to be suitable for the project? Was the resulting information useful to the project?  
Was the design and funding of the M&E plan effective and useful to the project (in terms of achieving objectives and impacts)?  
To what extent has the implementation of the M&E plan been a success or a disappointment? |
| **Sustainability** (Assign a rating) | To what extent will the project outcomes remain useful or continue after the project is completed?  
What are the main risks that could affect the sustainability of project benefits?  
Has the project been implemented in a gender-equitable way (in the broad sense) in terms of participation and delivery of benefits? |
| **Stakeholder engagement** (Assign a rating) | Were other stakeholders, such as civil society, indigenous people or the private sector involved in the design or implementation of the project? What were the consequences for the project outcomes? |

### 1.5 Methodology

9. The evaluation team conducted a literature review contributing to the development of the methodology, including evaluation tools such as the evaluation matrix and the specific questionnaire for project stakeholders. The literature review also supported the analysis of
the relevance of project activities to key policies, strategies and programmes related to oasis ecosystem management.

10. The evaluation approach was essentially qualitative, based on a set of data collection methods including: a literature review, stakeholder meetings in the form of focus group or individual/group interviews, direct observations and systematic analysis of project outcomes.

11. Together with FAO staff involved in the project, the evaluation team identified stakeholders to be interviewed during the evaluation at national and local level. These stakeholders’ role was to provide assessments of the outcomes achieved by the project and their sustainability. The list of stakeholders interviewed can be found in Appendix 3.

12. The data collection phase included site visits at the oasis level not only to meet the direct beneficiaries living in the oases, but also to identify all the problems of the oasis ecosystems. The oasis ecosystem was the focus of the analyses, although the project was not so much aimed at physical achievements in this ecosystem but rather at capacity building, promotion of information exchange and awareness raising for the safeguarding of this natural heritage which is of major social, economic and environmental importance.

13. Given the differences between the three countries and the physical and time constraints, the evaluation team interviewed the categories of stakeholders and organisations presented in the table below. Depending on each type of stakeholder, the evaluation team conducted discussions based on their remit in relation to the project and on questionnaires developed earlier. Discussions also took into account stakeholders not involved in one component or another, in order to gather their views and assess the quality of outcomes achieved and collaboration during project implementation.
Table 1: Categories of stakeholders interviewed

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Tunisia</th>
<th>Morocco</th>
<th>Mauritania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministries</td>
<td>• Regional Agricultural Development Commissions (CRDA)</td>
<td>• Ministry of Agriculture</td>
<td>• Ministry of Rural Development (MDR)</td>
</tr>
<tr>
<td></td>
<td>• General Directorate of Regional Development (AFA)</td>
<td>• Directorate of Territorial Planning (DAT)</td>
<td>• Ministry of Environment and Sustainable Development (MEDDD)</td>
</tr>
<tr>
<td></td>
<td>• Agricultural Land Agency (AFA)</td>
<td>• National Agency for the Development of the Oasis Areas and the Argan (ANDZOA)</td>
<td></td>
</tr>
<tr>
<td>State agencies</td>
<td>• Territorial Extension Unit (CTV)</td>
<td>• Agency for Agricultural Development (ADA)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• National Institute of Statistics (INS)</td>
<td>• Regional Office for Agricultural Development (ORMV)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Regional Centre of Oasisian Agriculture Research (CRRAO)</td>
<td>• Hydraulic Basin Agency (ABH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• National Agricultural Advisory Board (ONCA)</td>
<td></td>
</tr>
<tr>
<td>Projects</td>
<td>Regional Centre of Oasisian Agriculture Research (CRRAO)</td>
<td>INRA National Institute for Agricultural Research</td>
<td>Oasis Sustainable Development Project (OSDP)</td>
</tr>
<tr>
<td>Research institutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International NGOs</td>
<td>CARI/RADDO</td>
<td>CARI/RADDO</td>
<td>Program of Concerted Action on Oases (PACO)/CARI/RADDO</td>
</tr>
<tr>
<td>National NGOs</td>
<td>Association for the Safeguard of the Oasis of Chenini (ASOC)</td>
<td>Association Oasis Ferkla for Environment and Heritage (AOFEPR)</td>
<td>TENMIYA (RADD0)</td>
</tr>
<tr>
<td>Associations</td>
<td>Agricultural Development Groups (GDA)</td>
<td>• Associative Network for the Sustainable Development of Oases (RADD0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Economic interest group (EIG)</td>
<td>Participatory Oasis Management Associations (AGPO)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Irrigation Water Users Association (AUEA)</td>
<td></td>
</tr>
<tr>
<td>Consulting firms</td>
<td>Engineering and Development Council (CID)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unions</td>
<td></td>
<td></td>
<td>Regional Unions of Participatory Oasis Management Associations (UAGPO)</td>
</tr>
</tbody>
</table>

14. In the three countries, the evaluation mission interviewed about 80 people from public administrations, NGOs, international institutions, civil society, associations, research
institutions, projects and oasis management unions (see Appendix 3. List of surveyed people).

15. According to the initial intervention logic, the project would work in two pilot sites in each country. These sites were chosen on the basis of the availability of data on these oases. In fact, in Tunisia, the evaluation mission visited Tunis, Déguache, Kébili, Gabès and Chenini (the four pilot oases of the project). In Morocco, apart from Rabat, the evaluation team was in the Errachidia area and more specifically at Aoufous site (see Section on the Difficulties encountered by the evaluation in the Figuig oasis). In Mauritania, the evaluation team stopped in Nouakchott and did not travel due to time constraints and the overall evaluation programme.

16. FAO team’s efforts to make documents available to the evaluation team is much appreciated. This documentation details and highlights how gender issues, and more generally gender mainstreaming issues, were taken into account during project implementation. FAO Gender Policy and its objectives were a main reference for the evaluation.

17. The evaluation team followed the norms and standards of the United Nations Evaluation Group (UNEG) and adopted a consultative and participatory approach, seeking the views of stakeholders at different stages throughout the process. Different sources were used to crosscheck information. Evidence was validated through a triangulation of information among stakeholders. The evaluation also followed the United Nations Evaluation Group Ethics Guidelines.

1.6 Limits to the evaluation

18. The main difficulty of this evaluation was that the time allocated for data collection in the field was barely sufficient. Indeed, the mission had 15 days, travel days included, to collect data in three countries. In Mauritania, for example, the evaluation team interviewed all stakeholders in half a day. It however regrets that was unable to observe the functioning of the GIS installed at the Ministry of Rural Development. Despite this short time frame, the evaluation team interviewed all stakeholders and, better still, visited almost all of the oases targeted by the project — except those in Mauritania and in Morocco (Figuig), because one of the team members had gone there as part of another mission a month earlier and covered the project. The evaluation team therefore considers that the said site has been visited. Nevertheless, the above-mentioned limitations do not call into question the quality of the data and therefore the results of the evaluation.
2. **Background and context of the project**

2.1 **Context of the project**

19. Internationally, oasis systems cover about 30 percent of the drylands between the Sahara and Mongolia and support about 150 million people, each custodians of the culture and indigenous knowledge of these systems. The oasis system consists of a three-level canopy with date palms on the upper level, fruit trees/gardens in the middle and annual/perennial recurrent crops on the lower level. The management of these canopies and the technical practices associated with them are thousands of years old. Oasis ecosystems are based on careful management of scarce water and land resources, as well as on biological resources such as date palms. Oases are ecosystems patiently developed by the societies that live therein: they are complex social, ecological and economic constructions.

20. In the Maghreb, oases cover some 350 000 hectares. Their contribution to the region’s food security, the economy of the countries, the protection of natural resources as well as their essential role in the settlement of populations through job creation, are major assets for the development and balance of these territories. The sustainability of these fragile agro-ecosystems lies in the ability of their populations to find a balance between satisfying needs, economic dynamism and resource preservation in an environment where the notion of scarcity is central.

21. Despite this potential, oasis ecosystems are threatened by a range of complex biophysical and socio-economic factors. These factors are related to the expansion of agricultural land, increasing scarcity of water resources and competition for water, resulting in overexploitation of groundwater, land fragmentation, changes in traditional management practices, silting, industrialisation, urbanisation and environmental degradation. These are aggravated by the lack of innovative economic activities, rural exodus, loss of traditional knowledge and the collapse of the traditional production and social organisation system that had been developed around the management of oasis irrigation water supplied by natural springs.

22. Faced with the scale and scope of these challenges that threaten the sustainability of oasis ecosystems, each Maghreb country is trying to carry out actions to protect the exceptional and universal nature of oases through the development of several projects, either self-financed or financed through international cooperation. In 2010, Morocco took the initiative to draw up a strategy on oases and set up an institutional framework for the preservation of oases (creation of ANDZOA: National Agency for the Development of the Oasian Areas and the Argan). In 2015, Tunisia drew up a “Strategy for the Sustainable Development of Oases in Tunisia”, which suggests rethinking the management of oases in a context of integrated local development, around agriculture, which remains an indispensable socio-economic pillar for connecting the local population to its environment and its history. Mauritania has followed suit by developing an advocacy strategy dedicated

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to the preservation of oases and the creation of an institutional framework attached to the presidency.

23. With regard to civil society, the initiative of creating RADDO (Associative Network for the Sustainable Development of Oases) in 2001 – which is active in Algeria, Morocco, Mauritania, Tunisia and the Sahel – has brought together associations committed in the Maghreb and the Sahel to safeguard oases and promote sustainable development in oasis environments. It has also acted as an early-warning system on the situation of oases, its origins dating back to the Johannesburg Sustainable Development Summit in 2002. Since then, RADDO has supported many advocacy actions, both at national and international levels. RADDO has relied on the numerous civil society stakeholders involved in the preservation, safeguarding and restoration of the oases, especially on major CSOs in each country, namely: ASOC (Association for the Safeguard of the Oasis of Chenini) in Tunisia, AOFEP (Oasis Ferkla Association for Environment and Heritage) in Morocco and Tenmiya in Mauritania. The French NGO expert in combating desertification and initiator of RADDO, CARI, is coordinating the network. Being the organisation that brought the initial project to the GEF and FAO and having a legal status, CARI has been designated in ProDoc as the Project initiator. CARI (Centre of International Actions and Achievements)'s duty is to ensure, through its legal status, the coordination of RADDO.

24. To face these multiple challenges, the "Adaptive management and monitoring of oasis ecosystems in the Maghreb" project brought together several key stakeholders (associations, public authorities, research institutes, donors, professionals and grassroots farmers' organisations) from these three oasis countries, in order to address the lack of available information on the status of oases and to advocate on factual bases shared by all stakeholders and verifiable in the field.

2.2 Project description, objectives and components

25. The project aims at improving, expanding and sustaining the adaptive management and monitoring of oasis systems in the Maghreb. It is built around four components:

i. Component 1: Improving institutional capacity to collect, manage and monitor trends and impacts of land degradation.

ii. Component 2: Selection, characterisation and sharing of best practices for adaptive management of oasis ecosystems within the network.

iii. Component 3: Increased awareness of decision-makers, communities, associations and networks on oasis ecosystems and adaptive management tools.

iv. Component 4: Monitoring and evaluation.

26. The expected outcomes of the project are as follows:

i. The building of institutional and technical capacities to harmonise and manage data, and carry out geospatial analysis for the monitoring and adaptive management of oases.

ii. The identification, characterisation and sharing of good practices related to adaptive management of oasis systems.

iii. The development and implementation of an awareness and advocacy strategy on oasis systems as well as planning and decision support tools.
27. Key project information is found in Box 1 below:

**Box 1: Key project information**

<table>
<thead>
<tr>
<th>GEF ID:</th>
<th>5798</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficiary countries:</td>
<td>Morocco, Mauritania, Tunisia</td>
</tr>
<tr>
<td>Main implementing partners:</td>
<td><strong>In Morocco:</strong> the National Agency for the Development of the Oasis Areas and the Argan (ANDZOA); <strong>in Mauritania:</strong> the Ministry of Rural Development; <strong>in Tunisia:</strong> the Regional Centre of Oasis Agriculture Research (CRRAO) – Ministry of Agriculture, Hydraulic Resources and Fisheries; the Regional Centre for Remote Sensing of North Africa States (CRTEAN); the Associative Network for the Sustainable Development of Oases (RADDIO) and its focal point associations (ASOC, Tenmiya, AOFEP).</td>
</tr>
<tr>
<td>Other project partners:</td>
<td><strong>In Morocco:</strong> the Directorate of Territorial Planning (DAT), the Agency for Agricultural Development (ADA), the Regional Office for Agricultural Development (ORMV), Regional Observatories on Environment and Sustainable Development (OREDD), the National Institute for Agricultural Research (INRA), the Hydraulic Basin Agency (ABH), the High Commission for Water, Forests and the Fight against Desertification (HCEFLCD); <strong>in Mauritania:</strong> the Oasis Sustainable Development Project (OSDP); National Centre for Water Resources: Unions of Participatory Oasis Management Associations (UAGPO); <strong>in Tunisia:</strong> the Ministry of Local Development and the Environment, the Ministry of Tourism and Handicrafts, the General Directorate of Agricultural Production (DGPA), the Directorate of Soil, as well as the General Directorate of Water Resources (DGRE) and the General Directorate of Rural Engineering and Water Exploitation (DG/GREE), the Regional Agricultural Development Commissions of the Southern Governorates (Gabès, Gafsa, Kebili and Tozeur); the Agricultural Land Agency. The Arab Maghreb Union is also a partner at the regional level.</td>
</tr>
<tr>
<td>GEF focal area:</td>
<td>GEF-5 LD contribution to slowing down and reversing current global trends related to land degradation, particularly desertification and deforestation.</td>
</tr>
<tr>
<td>GEF Strategy/Operational Programme:</td>
<td>Point 4.2. Increase the capacity to use adaptive management tools in sustainable land management and to improve project performance with new tools or existing methodologies.</td>
</tr>
<tr>
<td>Approval date of the PIF:</td>
<td>11 June 2014</td>
</tr>
<tr>
<td>Date of validation by the CEO:</td>
<td>12 June 2014</td>
</tr>
<tr>
<td>Date of validation by the PPRC:</td>
<td>September 2015</td>
</tr>
<tr>
<td>Date of signature of the implementing agreement:</td>
<td>Morocco, 25 January 2016; Mauritania, 30 March 2016; Tunisia, 8 March 2016</td>
</tr>
<tr>
<td>Original project start date (Initial EOD):</td>
<td>1 January 2016</td>
</tr>
<tr>
<td>Effective project start date (Actual EOD):</td>
<td>5 May 2016</td>
</tr>
<tr>
<td>Original project end date (original NTE):</td>
<td>31 December 2018</td>
</tr>
<tr>
<td>Date of revision of the implementing agreement:</td>
<td>28 November 2018</td>
</tr>
<tr>
<td>Revised project end date (Actual NTE):</td>
<td>31 December 2019</td>
</tr>
</tbody>
</table>
Final evaluation of the project “Adaptive management and monitoring of the Maghreb’s oases systems”

2.3 Theory of change

28. During the project identification and design missions, a lack of information and knowledge about the status and trends of oasis ecosystems was noted among decision-makers, civil society organisations and local communities. This applies to all three project countries. Thus, the general objective of the project – to strengthen, expand and support the adaptive management and monitoring of oasis ecosystems in the Maghreb – contributes to a better knowledge of oases, in order to better manage them.

29. In order to achieve this objective, the project is based on one main hypothesis: adaptive management. Indeed, this project will achieve its objectives if only adaptive management becomes fully operational. The operationalisation of adaptive management consists in the development of information and decision support tools. The latter enable stakeholders to adjust their actions for a better governance of oasis systems in the short, medium and long term.

30. An in-depth analysis of the project shows that it was built on the basis of dynamic (adaptive management) and generic starting hypotheses (because the indicators for monitoring oases are the same in the three countries); observations are specific (there are specific indicators for Tunisia and Morocco) and adapted to national realities with a view to providing endogenous responses. The aim is to build on existing knowledge and experience and accelerate the adoption, coordinated at the Maghreb level, of best practices and technologies for oasis management.
31. Adaptive management brought about the expected change through the creation of synergies between several stakeholders (research and development institutions, NGOs, private sector, universities, and local communities living in oases) and capacity building. These synergies and capacity building have been an important focus during the implementation of this project at international, regional, national and local levels.

32. Moreover, the project objectives already embodied a positive response to the commitments made by each country in the framework of the three Rio Conventions (1992), namely: (i) the United Nations Convention to Combat Desertification (UNCCD); (ii) the United Nations Framework Convention on Climate Change (UNFCCC); and (iii) the Convention on Biological Diversity (CBD). They also strengthen the efforts of countries as well as national and international non-state stakeholders to advocate for the preservation of oases. In this framework, Morocco launched at COP22 in Marrakech in 2016 the “Sustainable Oasis Initiative”, based on Article 7 of the Paris Agreement which states the need to protect the most vulnerable ecosystems. All these initiatives for the preservation of oases were capitalised upon during the design of project “Adaptive Management and Monitoring of the Maghreb’s Oases Systems (MSP) GCP/SNE/002/GFF”.

33. Indeed, the structure of the project presents 15 activities for the implementation of six outputs which are articulated in four components to achieve the four expected results. For each result, the project has defined outputs, activities, monitoring indicators, and established a baseline to ensure rigorous monitoring of its target achievement (see Appendix 4).

34. However, the project’s logical framework did not define the outcomes that could link the results chain to the final objective. Therefore, in view of the regional dimension of the project and its coverage of three countries, it would have been advisable to develop a logical framework per country to take into account its specificities. Though all countries in the Maghreb share the problem of adaptive management of oases, the three countries are not at the same stage of management. Consequently, the monitoring and evaluation component should have included effect and impact indicators establishing the reference situation per country and setting specific target values.

35. Nevertheless, the four expected outcomes of the project can together produce the expected change. As a reminder, these outcomes are as follows:

36. With regard to Outcome 1 (O1): The building of institutional and technical capacities to manage, monitor and analyse oasis production systems. It is clear that this result is based essentially on the extent to which various countries address the situation (basic data, statistics, analyses and projects under way or completed in the oases). To achieve this, activities at the level of each country were modulated according to its needs and capacities. Consequently, data collection to develop the outcome and the involvement of the organisations’ representatives were specific to each country. The expected change introduced by this result is the development of a country-specific approach and the setting up of a database on the oases in each country. It is on the basis of this database that decision-making tools are produced and made available to decision-makers so that the most appropriate decisions can be taken in real time.

37. Concretely, with a view to achieving this outcome, the project: (i) Developed a Decision Support Tool for the adaptive management of oases, based on existing methods and tools;
(ii) Harmonised and standardised data collection and management practices at national and regional levels; (iii) Supported regional cooperation aimed at developing a platform for sharing geo-referenced data on the status and management of oases; (iv) Trained national R&D and monitoring centres on the use of the Decision Support Tool (Activity 1) and on data collection for oasis management; (v) Carried out information and data collection from pilot sites to validate the tools and methodologies developed; (vi) Provided Training of Trainers on natural resource management, sustainable land management and resource monitoring at the local/decentralised level; and (vii) Trained local communities on natural resource management, sustainable land management and resource monitoring at the local/decentralised level.

38. Thanks to the setting up of an integrated and harmonised GIS platform in the three countries according to the same architecture and the integration of gateways to link the different thematic GIS of the countries, change is expected in relations between the institutions in terms of data collection, sharing and processing; this joint work will foster consolidated and easy to process data for the preparation of multi-sector and multi-stakeholder decision support tools.

39. **With regard to Outcome 2 (O2): Strengthening the capacities of local stakeholders to disseminate knowledge and deliver training on good practices.** It is based on indicators (qualitative, quantitative) and is mainly linked to the implementation of activities such as: the number of good practices established; the percentage of people, women and youth trained. The development of a manual of good practices is the main output achieved, after a validation process at both regional and individual country levels.

40. In addition, the project has tried to put in place a system for monitoring the implementation and evaluation of capacity-building initiatives and programmes. Thus, the project has: (i) Trained local and national stakeholders in the identification and documentation of good oasis management and monitoring practices: (ii) Identified good practices through a participatory approach using data and experiences generated during Activity 5 (decision support tool) and the training delivered under Outcome 1.3, (iii) Trained associations, local partners and farmers in the replication and extension of the most relevant best practices. However, for reasons of efficiency, the project did not organise, as was planned, study tours to share and disseminate good practices. Nevertheless, as the good practices were chosen because of their actual presence in the field, the project tried to replicate them in other areas or even in other countries concerned.

41. **With regard to Outcome 3 (O3): Increasing the awareness of decision-makers, communities, associations and networks on oases and their adaptive management.** It was mainly based on the communication strategy, awareness raising and advocacy. During the planning stage the international, regional and local dimension which at each level requires specific didactic and pedagogical tools for institutional and personal communication were taken into account.

42. The activities carried out to achieve the three outputs, and consequently this Outcome 3, involved several sectors and several institutions, which required a specific organisation and gave rise to the idea of setting up a "regional coordination commission for oases sustainable conservation".
To achieve this result, the project wanted to proceed with: (i) the elaboration and development as well as the implementation of an advocacy strategy for the conservation of Oases, including elements based on partial tools (e.g. Charter of Oases, Alliance of Oases, etc.); and finally (ii) the deployment of a communication and awareness-raising strategy on the best practices identified, and on the role of oases in the economy, environment and culture. The activity of creating and publishing an Atlas of Oases was not carried out because the countries already have web-based atlases, and because the regional GIS integrates a complete mapping of oases, covering all areas of their development.

With regard to Outcome 4 (O4): Monitoring and evaluation. The project planned activities and indicators to monitor the outcomes which required the setting up of an organisation and appropriate tools for exchange and consultation. The project had planned to set up a chain of causality between inputs and impacts to prepare answers to evaluation questions and evidence of implementation collected according to a codified methodology.

However, in carrying out the activities of Component 4, the SC decided to make do with the various reports and situations prepared by the focal points.

Based on available documentation and interviews with stakeholders, the evaluation mission tried to understand how the activities, objectives, and likely impacts align, complement and overlap. This analysis led to the development of a simplified intervention logic that encompasses the project activities and is illustrated in the figure below.
Figure 2: Theory of change framework (results chain)

**Impacts**

1. R1: The institutional and technical capacities for the management, monitoring and analysis of oasis production systems are strengthened
   - i) Deepen knowledge on oases in order to better manage them
   - ii) Strengthen links with research and development institutions and organizations at regional, national and local level
   - iii) Adopt best practices and technologies for Oasis management

2. R2: The capacities of local stakeholders to disseminate knowledge of and deliver training on best practices are strengthened

3. R3: The awareness of decision-makers, communities, associations and networks on the oases and their adaptive management is reinforced

4. R4: Monitoring and evaluation

**Results**

**Component 1**
- Parameters and methodologies for monitoring the natural resources of harmonized oases are developed and used by research and development institutions, NGOs and local and national authorities
- The capacities of research and development institutions and government planners are strengthened in terms of geospatial analysis
- Experts, representatives of civil society and other resource people from the 3 countries are trained to organize workshops on the management and monitoring of natural resources in the region

**Component 2**
- Best practices for adaptive oasis management are selected, documented and shared

**Component 3**
- Awareness and communication tools to support advocacy, policy development and oasis planning are developed

**Component 4**
- Systematic data collection in the field to monitor indicators

**Activities**

1. Develop a Decision Support Tool
2. Harmonize and standardize data collection and management practices
3. Support regional cooperation
4. Training of R&D centers and communities
5. Collect information and data

**Policies/Strategies**

1. Stakeholder training for the identification of good practices
2. Identification through a participatory approach
3. Organization of study trips to share and popularize good practices
4. Training of associations, local partners and farmers
5. Advocacy awareness and communication tools
6. Creation and publication of an Atlas of Oases
7. Development and implementation of an advocacy strategy
8. Deployment of a communication and awareness-raising strategy on advocacy

**Source:** evaluation team
47. This intervention logic shows that the project operates at three levels: regional, national/country and local/local community/oasis. The adaptive management of ecosystems adopted by the project is interesting at this level of analysis, because the approach integrates research into conservation methods, statistics and CSOs for information collection, development and executing agencies for implementation.
3. **Findings**

Findings are analysed and broken down according to the evaluation questions to which they refer.

### 3.1 Evaluation question 1: Relevance

Were the project objectives consistent with operational programme strategies or GEF priority areas, country and FAO priorities? Was the working approach appropriate to strengthen, expand and support the adaptive management and monitoring of oasis ecosystems in the Maghreb?

**Finding 1. In the three target countries, the project is in line with national, GEF and FAO priorities.** Its intervention is closely aligned with the national policies and strategies of the pilot countries. The project design took into account all the foundations of the current policy and strategies of GEF, FAO and the three countries concerned, in particular, in the three thematic areas selected by the project.

**With regard to national strategies:**

49. In Morocco: the project is in line with the priorities set out in the National Human Development Initiative (INDH). This initiative aims at improving the living conditions of the population through the development of social infrastructure and incentives at the level of basic geographical units, and through the creation of small income-generating projects, especially for young people and women. The project also aligns with some of the objectives of the Green Morocco Plan (GMP), which aims at helping agriculture achieve sustainable growth and promoting best land management practices. Ultimately, the GMP also aims at reducing poverty (one of the root causes of oasis degradation), which is also aligned with the project. In addition, the project is already contributing to Morocco's national strategy for the sustainable development of oases aimed at ensuring the sustainable and resilient use of these fragile areas. Finally, the project is also aligned with the Government's National Action Programme to Combat Desertification, which combines efforts to combat desertification with broader poverty reduction and rural development strategies.

50. In Tunisia: the project is in line with the Strategy for the Sustainable Development of Oases (2015), which has the following three main objectives: 1) to rehabilitate and conserve the ecological and environmental functions of oasis ecosystems; 2) to rehabilitate and strengthen the economic and socio-economic functions of oases; 3) to rehabilitate and enhance the socio-cultural and touristic values of oases. The project is in line with the National Action Plan (NAP) to Combat Desertification through its objective to combat desertification thanks to resource protection and other development measures – as will be developed through the sharing of best practices in Sustainable Land Management (SLM). In addition, as the project aims at strengthening and sharing best practices in the adaptive management of oasis ecosystems, it will contribute to Tunisia's National Action Plan for Biodiversity Conservation, whose priorities include the protection and adequate management of ecosystems.

51. In Mauritania: the project is aligned with the National Strategy for Accelerated Growth and Shared Prosperity (SCAPP 2016-2030), which replaced the third strategic framework of the Action Plan for Poverty Reduction (2011-2015), as well as the Poverty Reduction Strategy
The project design tried to take into account all the foundations of the current policy and strategies of GEF, FAO and the three countries concerned, in particular, in the three thematic areas selected by the project, namely: 1) strengthening institutional and technical capacity for data harmonisation and management, and geospatial
55. analysis for the monitoring and adaptive management of oases; 2) identifying and sharing good practices in the adaptive management of oasis systems; and 3) developing an awareness and advocacy strategy on oasis systems, planning and decision support tools.

Finding 2. The project is relevant to the areas of intervention and to its main priority: oases. Indeed, the choice of oases is justified for two reasons: these ecosystems are experiencing a multitude of problems (intensive exploitation, climate change, land, social, economic, etc. crises, leading to rapid degradation of biodiversity and increased marginalisation of these territories); and, oases are affected by political marginalisation. This lack of interest is largely linked to the lack of monitoring and of information, leading to decision making difficulties, as well as to coherent and coordinated actions between the many stakeholders.

56. The relevance of the project stems mainly from the three countries’ awareness of the degradation of Oases, to which RADDO has actively contributed, the increasing loss of biodiversity, and above all the need for regional action since the problems of Oases are similar and require concerted and shared responses. The project also took into account the different national, institutional, strategic initiatives in the environmental field in general and biodiversity in Oases in particular. All the actions undertaken are aimed at fulfilling international commitments to achieve Sustainable Development Goals (SDGs), particularly SDG 15 in relation to CBD and the UNCCD, and more specifically Target 15.3: “By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.” The project supports the three countries in meeting their commitments under international conventions, in particular:

i. United Nations Convention to Combat Desertification (UNCCD);

ii. United Nations Framework Convention on Climate Change (UNFCCC);

iii. Convention on Biological Diversity (CBD).

57. In this regard, it is worth recalling the efforts made by the three countries involved in the project for the preparation of two previous versions of the National Biodiversity Strategy and Action Plan (NBSAP) and a third and final updated 2011 – 2020 version of the Convention on Biological Diversity (CBD/NBSAP project). All this work has been carried out within the framework of the Global Environment Facility (GEF) strategy, which supports projects in developing countries in the areas of biodiversity, climate change, international waters, land degradation, the ozone layer and persistent organic pollutants;

58. The project has also helped in promoting the integration of many initiatives directly or indirectly related to Oases and which are at different levels of implementation. In 2010, Morocco created a dedicated agency, the National Agency for the Development of the Oasian Areas and the Argan (ANDZOA), which has led to greater coherence between sectoral policies in these territories and public investment. This collaboration is more able to address the problems of oases. Since its creation, ANDZOA has been promoting an international multi-stakeholder initiative, the "Sustainable Oasis Initiative", which is an international initiative in favour of oases. However, at the same time and independently, Tunisia prepared a strategy for the sustainable development of Oases in March 2015. As for Mauritania, it is looking into developing a global strategy specific to oases and creating a dedicated institutional structure.
59. Several oases have already been recognised as FAO’s “Globally important agricultural heritage system” (GIAHS), as they aimed at reconciling biodiversity conservation, sustainable use of natural resources and human development in agriculture. This recognition associated with the labelling of oasis production could thus constitute models of sustainable development that take into account economic, social and environmental aspects beyond the Maghreb region.

60. Thus, the relevance of the project lies in the fact that it simultaneously tackles several existing challenges in oasis management through the implementation of a geographic information system. This generates real-time information on oases and thus, leading to effective decision-making for their proper management. Moreover, it defines practices that best ensure the sustainable management of oases, as well as advocacy and awareness-raising actions for key stakeholders at all levels of decision-making, at both national and international levels.

Finding 3. The participatory approach adopted by the project has enabled technical cooperation between the public institutions of the countries and various other stakeholders, including civil society organisations in the Maghreb. This allowed the project to: (i) Have an overview of the state of natural resources and promote relevant knowledge sharing and the pooling of good practices in oasis monitoring and management; (ii) Establish and organise a partnership and a network of relationships that constitute a driving force for innovation and a consolidated governance and promotion system for oases; (iii) Build the capacities of stakeholders involved in the monitoring and implementation of sustainable development approaches and processes. However, the evaluation noted the absence of certain key stakeholders such as decentralised local authorities and some universities working on rural development.

61. The project adopted a relevant approach for the adaptive sustainable management of Oases. This approach integrates research into conservation methods, development and implementing agencies, CSOs. Moreover, it uses decision support tools prepared on approved technical bases, identification and regular extension of good practices and knowledge, to the right types of users, at the right times, and the development of national and international advocacy strategies closely coordinated among all stakeholders. The overall implementation approach can be summarised as follows:
62. Relevance is also proven at the level of project implementation by FAO, as GEF executing agency, under national arrangements with the Ministry of Rural Development (formerly Ministry of Agriculture) in Mauritania, the Regional Centre of Oasian Agriculture Research (CRRAO) in Tunisia, and the National Agency for the Development of the Oasian Areas and the Argan (ANDZOA) in Morocco. In addition to these national partners, there are other regional partners, such as the Regional Centre for Remote Sensing of North Africa States (CRTEAN, based in Tunisia), the Associative Network for the Sustainable Development of Oases (RADDIO), and regional oasis-related institutions (NGOs and POs). The functioning of all these partners is analysed in Section 3.2 dealing with project efficiency.

63. The choice of project sites was determined by the availability of data on oases, which was supplemented by field surveys to feed and test the Geographical Information System before its generalisation to all oases. Initially, the project was to select two sites per country, for a total of six. In the end however, the project worked on nine sites: three in Morocco (Figuig, Aoufous and Tinjdade); four in Tunisia (Gabès, Kebili, Tozeur and Gafsa); and two in Mauritania (Tawaz Oasis in the Adrar region and El awjé Oasis in the Assaba region).

64. Since its inception, the project chose to rely on CSOs as service providers for the implementation of the different components. To this end, CARI\(^3\) was named in the ProDoc as the executing or implementing partner to execute the project through an Associative Network for the Sustainable Development of Oases (RADDIO), the latter lacking the legal status necessary to contract as a legal entity with FAO/GEF. In the same project document, CARI also appears as a co-financing partner and is therefore appointed as a member of the

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\(^2\) Adapted from the presentation of FAO Tunisia project by the evaluation team.

\(^3\) CARI is a French international solidarity association with expertise in desertification. Since 1998, it has been fighting against soil destruction in arid environments which are victims of climate change.
SC. The fact that CARI is at the same time a member of the SC giving strategic guidance for the implementation of the project and an implementing partner created ambiguities among the national institutions of the countries and raised the question of whether CARI was not in a conflict of interest.4

65. In practice, CARI and RADDO5 have relied on legally recognised national associations, which have been present in the field for several years and which are used to working and will continue to work with state development institutions in the oases. In Morocco and Tunisia, the presidents of these associations are also RADDO focal points. These associations are: ASOC (Association for the Safeguard of the Oasis of Chenini) in Tunisia; AOFEP (Oasis Ferkla Association for Environment and Heritage) in Morocco; and Tenmiya in Mauritania. The choice of these associations was relevant and decisive for collecting information, identifying good practices and developing the advocacy strategy. CARI has mainly worked to: coordinate stakeholders and actions related to the responsibilities of RADDO; develop methodologies; build capacity and produce documents concerning the outcomes related to Components 2 and 3; and in general, organise activities dedicated to civil society. Seen from this perspective, the choice of CARI is all the more justified since its contribution is precisely to promote an organised contribution from civil society structures in the three countries; indeed, at the beginning of the project, partners were only national stakeholders who did not have much of the expertise CARI was able to provide. Secondly, CARI had already been identified during project design as an implementing partner. Finally, in the LoAs signed between CARI and FAO, it was clear that CARI mobilises the specific expertise of RADDO. In addition to CSOs, the project benefited from the contribution of professional irrigation water management organisations, namely: AUEA (Irrigation Water Users Association) in Morocco; GDA (Agricultural Development Groups) in Tunisia; and AGPO (Participatory Oasis Management Association) in Mauritania.

66. In sum, the overall relevance of the project is considered highly satisfactory (HS), as its design took into account all the foundations of the current policy and strategies of GEF, FAO and the three countries concerned, in particular, in the three thematic areas selected by the project. Thus, the project is relevant to the areas of intervention and to its main priority: oases. It is also relevant in terms of its working approach, which takes into account the local, national, regional and even international levels.

3.2 Evaluation question 2: Effectiveness

To what extent does the actual outcome of the project correspond to the expected outcomes? Building of institutional and technical capacities to harmonise and manage data, and carry out geospatial analysis for the monitoring and adaptive management of oases? Identification, characterisation and sharing of good practices related to the adaptive

4 Nevertheless, it should be noted that CCRAO, the implementing partner of the project through different LOAs, is also a member of the SC but in this case, no objection was raised by other partners.
5 RADDO has existed since 2001 as a private grouping of associations committed in the Maghreb and the Sahel to safeguard oases and promote sustainable development in oasis environments. This network has so far chosen not to have a legal status and carries out advocacy that weighs indirectly upon public institutions in the project countries, and without having the capacity to formally impact public decision making. However, its gradual consolidation and sustainable mobilisation in the three countries is an added value for the sustainability of project actions.
management of oasis systems? Development and implementation of an awareness and advocacy strategy on oasis systems as well as planning and decision support tools?

67. The three operational components of the project have been implemented, namely:
   i. Component 1 dealing with improving institutional capacity to collect, manage and monitor trends and impacts of land degradation.
   ii. Component 2 on best practices for the adaptive management of oasis ecosystems.
   iii. Component 3 dealing with increased awareness of decision-makers, communities, associations and networks on oasis ecosystems and adaptive management tools.

Finding 4. Component 1 has been fully implemented, in accordance with the project design, if the evaluation is limited to a simple analysis of the indicators. But it is worth noting that in these three countries, at different levels, efforts still need to be made to finalise the input of data into the GIS and to output queries in real time in order to effectively respond to the demands of stakeholders, so as to ensure the adaptive management of oases as envisaged by the project.

68. The objective of this component is to strengthen, expand and support the adaptive management and monitoring of oasis ecosystems in the Maghreb. The activities of this component are carried out with the development of information and decision support tools in the form of GIS to enable development partners adjust their actions with a view to good governance of oasis systems in the long term and the harmonisation of data and geospatial analysis between countries. With this tool, developed from “Open source” software, it is possible to access the database, to modify it and to edit output reports according to requests. Indeed, the GIS, developed on the same basis and with the same architecture, is identical for the three countries and aims at filling a gap in terms of information approved, updated and collected in a participatory manner with all the stakeholders involved in the sustainable development of oases. The synthesis and analysis of the data allow to establish a factual basis to: i) advocate for oases, ii) monitor economic, social, environmental, cultural, socio-economic changes on the basis of dynamic indicators, iii) carry out prospective analyses to anticipate decision-making, and feed strategies, policies and action plans for the sustainable development of oases.

69. The GIS developed by the project can provide answers on the status of 71 indicators between the countries, including indicators specific to each country (61 common indicators for Morocco, Tunisia and Mauritania and 10 indicators specific to Tunisia and Morocco). The proposed system of indicators is layered in four levels (themes, headings, subheadings and indicators).

70. Three themes are covered by the oasis surveillance and monitoring platform. The first theme concerns ecological monitoring and addresses the components of the biophysical environment. The second theme concerns socio-economic monitoring and deals with the social, cultural and economic dimensions of oasis territories. The third theme focuses on the monitoring of practices, in relation to the strategies of the stakeholders.
The indicators were developed following a rigorous participatory process with the following steps verified by the evaluation team:

a) identification, on a participatory basis, of the indicators required for a spatial-temporal monitoring of oases for each country;

b) selection and harmonisation of the set of common indicators for the three countries in response to the requirements of the oasis monitoring and surveillance platform;

c) report of the regional workshop for the harmonisation and validation of 71 indicators;

d) design and validation of the conceptual model for the operation of the oasis surveillance and monitoring platform;

e) sketch of the architecture for the oasis surveillance and monitoring platform;

f) design of a Geographical Information System and a database for the “Adaptive Management of Oases”;

g) implementation of a training and capacity building programme on the harmonisation and standardisation of data collection and management practices at the regional level;

h) organisation of 13 national and 2 regional workshops to build the capacity of partners in indicator identification, GIS, remote sensing and GPS use. The training was attended by 341 participants, including 82 women (24 percent);

i) strengthening of partners’ material capacities;

j) information and data collection from pilot sites to validate the tools and methodologies developed.

Source: evaluation team
72. All local and regional stakeholders participated in the data collection in the pilot sites. Furthermore, in Tunisia, the rate of data entry into the GIS is about 90 percent for four sites. In Morocco and Mauritania, the rate is almost the same for all the sites selected per country (three in Morocco, two in Mauritania). To operate the GIS, the evaluation team noted the recruitment of computer specialists in geolocation, one per country, who have been trained within the framework of the project and are still supervised by the project’s international GIS expert.

**Figure 5: Overall Geographic Information System (GIS) architecture**

73. The national platform for the adaptive management and monitoring of oasis systems in the Maghreb is organised around hardware, software, web, data, administrators and users. For each element, procedures are planned to ensure the reliability, security and maintenance of the system.

74. In addition, the GIS set up by the project takes into account all the initiatives carried out in each country, namely:

i. Morocco: Palm GIS; ‘Projet de Développement Rural dans les Zones Montagneuses de la Province d’Errachidia’ (PDRME) GIS (Regional Office for Agricultural Development [ORMVAT] 2008-2014); Tafilalet Oasis Information System (MAT); ORMVA-Quarzazate biodiversity GIS; ‘Système d’Information National de l’Environnement’ (SINEDD) and ‘Systèmes d’Information Régionaux de l’Environnement’ (SIRED); WATER GIS; Resource management and exploitation; Sensitivity of groundwater during drought.

ii. Mauritania: Oasis GIS (Two wilayas, limited); Red Weevil GIS; Inventories of hydro-agricultural works (Ms Access).

iii. Tunisia: Agricultural map (not updated, non-operational); ‘Gestion Durable des Ecosystèmes Oasiens en Tunisie’ (GDEO) Oasis project; Water resources inventories; Sylvo-pastoral inventory; ‘Système National d’Information sur l’EAU’ (SINEAU)/‘Système de Gestion des Ressources en Eau’ (SYGREAU) (General Directorate of Water Resources [DGRE]).
Currently, the project has set up the GIS platform and tested it by entering data of some sites for illustrative purposes. This is the case of Tunisia where CRRAO used the GIS to monitor the impact of date palm drying. In this particular case, thanks to the GIS, the exact location of the area affected by this disease was found, and this facilitated the monitoring of treatment impact. In the same vein, again in Tunisia, it was concluded from exchanges with stakeholders that GIS is facilitating the initiative on the general census of agriculture (GCA).

It is unfortunate that the project has not planned to achieve the result relating to the preparation of the decision support elements that underpin the achievement of the objective relating to the adaptive management of oases. It would have been effective to continue the project action until the hosting of the GIS, thus ensuring its security and maintenance while facilitating access for users, i.e., GIS administrators, institutional users or the general public. The current risk is that the hosting of the GIS and its use may be compromised by a lack of financial resources, or by Internet bandwidth problems on the part of both users and administrators.

Indeed, the system operationalisation and its on-line presence remains to be finalised, after project closure and with the countries’ financial resources. All the remaining work depends on the financial means and the willingness of each country to go through with the process to facilitate the adaptive management of oases. It is important to recall that sharing and centralising data remains a challenge at the country level in Africa. Thanks to the project, decision-makers increasingly understand the importance of managing these fragile oasis ecosystems based on data, information and science. The project has succeeded in setting up oasis database management systems through signed memorandums of understanding (MoUs) and synergies established between different key stakeholders (public institutions, universities, research centres, private sector, specialised agencies, etc.). Also, it is worth noting that requests such as those developed by CRRAO with these partners – including the land request which is a relevant example to help decision-making – are beginning to emerge. According to the evaluation team, the outcomes achieved through this component are satisfactory.

**Finding 5. Component 2 of the project adopted a harmonised and participatory approach in the three countries to identify, characterise and share good practices in the adaptive management of oasis ecosystems. This approach is highly appreciated by all stakeholders as it has ensured their capacity building (learning by doing) at local (oasis), national and regional levels as well as its ownership.**

The process of identifying and characterising good practices has been broadly the same in Mauritania, Morocco and Tunisia. This process has gone through several stages, namely:

i. development of the methodology for the capitalisation of good practices and the pooling and sharing system;

ii. identification of good practices per country and description of each one;

iii. selection and participatory validation of good practices at the national level;

iv. training in the capitalisation of good practices;

v. dissemination and sharing of the selected good practices. The project also provided support for the implementation of good practices at the project’s pilot sites. This last
phase was not included in the project activities, but the project intends to carry this out instead of the initially planned exchange trips between oases.

79. Throughout this process, the project organised two regional workshops and about ten national workshops with the participation of about 294 people including 59 women. All these workshops aimed at training participants in the collection (development of data collection tools, preparation of good practice sheets) of good practices in the field, their sharing and their validation at the national and regional levels.

80. In Morocco, the project involved the University of Errachidia and more specifically the Faculty of Science and Technology, which was not initially foreseen among the project partners. The involvement of this faculty is an important added value for the project, in the sense that it reinforces the scientific character of good practices, their improvement and dissemination through the work of students (dissertations, theses and publication).

81. In Mauritania, the evaluation team appreciated the prevailing spirit of collaboration between the civil society (Temniya) responsible for the good practice process and public authorities, notably the Ministry of Agriculture. According to the evaluation team, the two partners worked closely from the preliminary phase of data collection through its validation at the national level. In the other two countries, this collaboration only took place during validation workshops. Besides, in Morocco, as in Mauritania, the process of identifying a good practice involved individual breeders and farmers as well as representative structures such as associations and oasis management unions.

Finding 6. Out of 61 practices identified, the project validated 33 good practices at regional level, including some specific to each country, 13 for Tunisia, ten for Mauritania and ten for Morocco. Unfortunately, the dissemination and sharing of these good practices is not as successful as anticipated. At the end of the project, it was expected that at least 20 good practices would be identified, documented and shared, out of which, at least 05 would take into account the specific needs of women.

82. At the time of the evaluation, the project had already identified 33 good practices and documented them through physical and electronic media. These 33 good practices were selected through a participatory process on the basis of FAO's 07 criteria for identifying good practices (Proven successful; Economically, environmentally and socially sustainable; Gender-sensitive; Technically feasible; Result of a participatory process; Replicable and adaptable; Reduces disaster risk and builds resilience). They cover 04 themes including: water, governance, resource management and oasis development.

83. With regard to the sharing of these good practices, the evaluation found that the process is ongoing, but actions are still rather timid. One of the key steps on which the project is currently working is the translation of the collection of good practices into Arabic (these practices currently exist in Berber, an important local language in Morocco). Without this prerequisite, dissemination to the beneficiaries living in the oases will have mixed results, as they read and express themselves mainly in Arabic.

84. In the three countries where the project is being implemented, it was concluded that the dissemination and implementation of certain good practices require and will continue to require human, logistical and financial resources. These constraints are likely to be a major impediment to the dissemination process and implementation of good practices, because the project is drawing to a close. This is the case of the good practice on groundwater
replenishment in Morocco. Although appreciated by the beneficiaries, the expensive nature of these good practices emerged after discussions with the experts of the Hydraulic Basin Authority. In Tunisia, the good practice currently being implemented by ASOC with the support of the project concerns the manufacture of animal feed; this is another example of an expensive good practice. At the time of the evaluation, ASOC, which is responsible for facilitating the implementation of this good practice, had just acquired an electric shredder with project funding. During the evaluation team’s visit to Mauritania, it emerged from the exchanges that several good practices are indeed expensive. Moreover, even if the implementation of good practices is not part of this project, for the Evaluation Team, good dissemination requires an interactive process between the project and the beneficiaries and not a simple distribution of documents.

85. With regard to the dissemination of good practices, ASOC organised in Tunisia, within the framework of these non-project activities, a workshop to disseminate 33 Maghrebian good practices, in the presence of:
   i. eight bearers of good practices;
   ii. ten associations;
   iii. two donors;
   iv. five institutions.

ASOC also took advantage of the Kébili International Date Festival to disseminate these practices. It also organised an information day on good practices at the Kébili Delegation. Moreover, at the Date Fair held in Erfoud, Morocco in October 2019, 5,000 good practice sheets were distributed to visitors; similarly later, in Cairo, sheets regarding good practices related to water and soil were distributed during "Land Water Days" held in February 2019.

86. In sum, as regards Outcome 2 on the identification, characterisation and sharing of good practices related to the adaptive management of oasis systems, this outcome is satisfactory because the good practices are identified at the national and regional level and well documented. However, their sharing and dissemination are not fully achieved (the Evaluation Team could not verify and was not aware of any dissemination in Mauritania for example). Moreover, human, logistical and financial resources are not guaranteed for the implementation of some expensive good practices and out of the reach of all oases.

Finding 7. Component 3 has developed a set of effective and appropriate tools – specific to sustainable oasis management and adaptable by country – to ensure that oasis ecosystem issues are taken into account at the national and international levels. Although they have not yet been validated by the project, these tools exist at the regional and national levels, and serve national and international civil society. According to the evaluation, these tools are not yet sufficiently used to achieve the expected outcome.

87. An awareness and advocacy strategy on oasis systems has been developed. The document outlining this strategy includes objectives at the international and national levels. At the international level, this advocacy has three objectives: (i) recognise oases as vulnerable ecosystems and heritage to be preserved within the three Rio Conventions (Convention on Biological Diversity (CBD); United Nations Framework Convention on Climate Change (UNFCCC); United Nations Convention to Combat Desertification (UNCCD); (ii) develop links between the different Conventions on the theme; (iii) better link this advocacy on the Conventions with the processes of the Sustainable Development Goals (SDGs).
Findings

88. At the national level, in Morocco, the strategy aims at achieving an integrated approach to oases on a territorial basis and ensuring sustainable water management in Moroccan oases. In Mauritania, the strategy intends to create a National Agency for Oases’ Sustainable Development (ANDDO) and to define a National Strategy for the protection and sustainable management of oases. In Tunisia, the strategy sets out the creation of a National Oasis Council (CNO) and the establishment of a legal framework specific to oases.

89. This advocacy strategy was developed in a participatory approach with the effective participation of all stakeholders in the three countries, through three national workshops and one regional workshop according to the project and the verifications made by the Evaluation Team. These workshops were attended by about 100 participants including 12 women. Regarding advocacy tools, the project has produced a declaration on oases, made a film currently under validation by FAO, and written five position papers and five information notes. In addition, in Tunisia, within the framework of the project, the NGO ASOC developed a position paper on the status of oases in three languages and a Tunisian slogan on oases.

90. Concretely, and given the logical project progress over its three years, in terms of advocacy, this NGO participated in two international events only (COP22 on climate change and COP14 on desertification). In contrast, CARI and its partners successfully held a stand and organised animations frequented by thousands of visitors and dedicated to drylands and oases during the two weeks of COP22 in Marrakech. During this same COP, the Sustainable Oasis Initiative was launched. The project bore the full costs for a total of 15 people who came from the various countries of the Maghreb and the Sahel; 16 associations were represented including CARI, as coordinator of RADDO, and RADDO members too. AOFEP of Morocco, ASOC of Tunisia, Tenmiya of Mauritania, RADDO, FAO and AMU in partnership with ANDZOA, AOFEP and the Sustainable Management of Oasis Ecosystems (GDEO) Programme in Tunisia organised a side-event on the adaptive management of oases in the Maghreb. The aim was to recall the need for a concerted approach and an adaptive management of oasis agrosystems in the Maghreb through the presentation of different initiatives in favour of oases. More than 80 people attended the event.

91. As regards COP 14, within the framework of the Adaptive Management and Monitoring of Oasis Systems (GASSOM) project led by FAO, the project supported the participation of 3 members of the Associative Network for the Sustainable Development of Oases (RADDO) in COP 14. RADDO, a stakeholder in the project, was able to mobilise other financial partners to set up a delegation comprising a total of nine people from Algeria, Morocco, Mauritania, Tunisia and France, as well as an Italian partner present on behalf of the "LabOasis" Foundation. This oasis participation (in different formats: in plenary during the Open Dialogue Session; a special event at the Rio Pavilion; several specific side events including the India Pavilion and the inclusion of oases in declarations during the ministerial segment) in the convention has highlighted the reality that in an international event such as this one, the oasis issue is very specific and therefore very difficult to take into account, because it is not very unifying at the global level. It is therefore crucial on the one hand to extend the link between all countries with oases, and on the other hand, to link the oasis issue to issues directly related to it on a wider scale. In this sense, this COP 14 made it possible to strengthen the relationship between oases and Land Degradation Neutrality (LDN). LDN is based on the trypptic "Avoid, Reduce, Restore"; and the traditional oasis functioning avoids land degradation and restores oases by combating desertification. For national and international advocacy of oases, it is imperative to build on COP 14.
However, according to the evaluation team, this third outcome was therefore not achieved because the logical framework projected that “1 000 people, including about 100 VIPs, would adhere to the values of the oases through a public declaration at the end of the project”. The project could have carried out a strategic reflection to implement Component 3 by presenting to high-ranking personalities in each country and at the regional level, for example, the development of tools and the (regional and national) consolidated strategy with concrete advocacy actions. According to the Evaluation Team still, many stakeholders deem the participation of around 100 participants (including 12 women) in the process of drawing up and validating the strategy for three countries restrictive for such an important subject. Moreover, partners implementing Component 3 would benefit from involving a larger number of stakeholders to ensure national and regional ownership of the tools and strategies developed.

Although these tools are beginning to be used by national and international civil society, the project would benefit from facilitating their validation in order to give greater credibility to the documents produced and to serve as a “branding” tool for the donors who financed this project.

In short, the project would benefit from validating all the tools produced and finalising quickly the advocacy action plan (local, national, and international) with a medium-term vision, so that the plan will be useful after the project. These tools could already be sufficiently disseminated at the project’s closing workshop. According to the Evaluation Team, the outcomes expected through this component are satisfactory.

It should be noted that, at the end of the project, most of the direct objectives were achieved, namely: the development of a tool for collecting and processing oasis data that can be used as a decision-making tool; the identification of good practices; and the development of a consolidated regional and country-specific strategy. The effectiveness of the project is therefore rated as satisfactory (S), as it has only minor shortcomings due to the year-long delay in project implementation.

But beyond these achievements, the direct, indirect or induced impacts of the project components are closely linked to the nature of the activities still to be undertaken after the project closure to operationalise and sustain the tools developed. Highly positive effects are expected regarding the management of potential impacts on the preservation of oases, in particular: training, communication on oases and the integration of the adaptive management of oases in the three beneficiary countries. These positive effects concern all three components of the project.

The project components do not generate immediate negative effects on the adaptive management of Oases. However, the lack of resources to manage, host, maintain and provide access to the developed decision tools, will greatly impact the quality of the results, as well as the efforts made to implement the different components of the project. The change advocated by the project will inevitably include: taking into account the management of country GIS and their operationalisation; sharing, popularising and effectively implementing good practices; and also conducting advocacy actions at the local, national, regional and international levels.
3.3 Evaluation question 3: Efficiency

Financial and human risks (capacity building): To what extent has the project been implemented efficiently, particularly in terms of costs? What were the concrete effects of co-financing? How did the decrease in co-financing or the higher than expected achievement affect project outcomes? How effective was the capacity building of individuals, institutions and for an oasis-friendly environment? Adaptive management: To what extent did the implementing agents concretely fulfil their roles and responsibilities in the management and administration of the project? Has the project been able to adapt to changing conditions in order to improve the efficiency of its implementation?

Finding 8. The evaluation team notes a serious difficulty in rationally and accurately analysing the financial resources used against the activities and results achieved. Despite this difficulty, the results show that resources would have been used efficiently, notwithstanding delays in programming. In addition, the project experienced a delay\(^6\) of 07 months in its implementation. Despite this delay, the project significantly contributed to building individual and institutional capacities. Its efficiency could have been improved if ANDZOA’s achievements had been more strongly emphasised in Morocco’s advocacy strategy.

98. In terms of compliance with the implementation schedule, it is noted that in the three countries, there was a significant delay in the implementation of the project, mainly due to the delay in starting the activities of Component 1. Despite this delay, the project significantly contributed to building individual and institutional capacities in that: three GIS-Oasis platforms have been developed and harmonised for decision support and the adaptive management of oases; a multi-stakeholder process to strengthen knowledge exchange on oases has been launched; 33 good practices have been identified and validated; a dissemination dynamic is underway; and more than 700 people from 40 institutions are involved in the three components of the project.

99. With regard to the activities carried out and the results obtained, the Evaluation Team concludes that the financial resources were used primarily to carry out activities for the direct benefit of the target populations. However, the evaluation team was not given any substantial elements such as the project financial audit to assess either the quality of the expenditure, compliance with the procedures for using the funding made available to the project, or even the adequacy between the rate of implementation of the project activities and the rate of disbursement at a specific time.

100. However, in 38 months of project implementation,\(^7\) 85 percent of GEF funds were consumed and 90 percent of the co-financing materialised, i.e. 100 percent for the

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\(^6\) The initial EOD date of the project was 01/01/2016 and the FAO team was ready to start project activities. However, the late signing of the project agreement, notably by the Government of Morocco on 25/06/2016, resulted in a slight delay in the setting up of the project team (national focal points). The effective start has been aligned to the date of recruitment of the regional project coordinator dated 05/05/2016 which would be the actual EOD date of the project. Thus, the NTE date should be the end of May 2019. An extension of seven months was introduced in November 2018, i.e. six months before the NTE date. The project was thus delayed by seven months.

\(^7\) At the date of the evaluation, i.e. end of November 2019. As of 31 December 2019 (NTE), 99.91 percent of GEF funds were consumed (USD 1 725 094 vs. USD 1 726 486). This is practically 100 percent of the allocated funds. As for the co-financing materialised, it was as follows: 104.7 percent for the Government of Morocco, 99.4 percent for
Government of Morocco, 97 percent for the Government of Tunisia, 87 percent for RADDO via CARI and 63 percent for the Government of Mauritania. 90 percent of the activities have been carried out or started. According to the Evaluation Team, these figures show that the project should not encounter any particular difficulties to consume all the funding and to carry out all the activities. At the time of the evaluation, no such strategy was presented.

**Finding 9.** In the three countries, the Evaluation Team found that during project implementation, actions between the different stakeholders were coordinated informally. The technical monitoring committees, in particular, set to be involved in the project management, did not function formally as a framework for consultation and monitoring of the project (no meetings). Despite the poor functioning of TMCs, stakeholders involved in Components 1 and 2 met regularly and the synergies of actions were improved and strengthened. However, cohesion and coordination among the various stakeholders remained weak with regard to the implementation of Component 3 on advocacy.

101. In all countries, exchanges with stakeholders have shown that the project was a good example of synergy and collaboration between key institutional stakeholders in charge of rural development (Agriculture, Livestock, Environment, Water) and stakeholders of civil society, research and communities living in the oases. Within the framework of GIS implementation, the participatory approach favoured the identification of several indicators in several fields. Indeed, stakeholders worked together in a spirit of harmony to implement GIS in each project country, through several workshops for consultation and validation of the indicators. This collaboration even continued during the training on data collection and the data collection itself to feed GIS. The same approach was used during the identification, characterisation and validation of good practices.

102. Conversely, Component 3, under the leadership of CARI – according to the stakeholders implementing the project and especially the focal points – experienced few synergies between stakeholders, despite the few workshops organised to train them in the elaboration of advocacy documents and the validation of a consolidated strategy.

103. The situation that prevailed during the implementation of Component 3 can be partly justified by the absence of a framework for dialogue and monitoring at the project level in each country, and also by the fact that during the five SCs held in three years, the status of CARI was the subject of fierce debates. For the SC members, CARI was strictly a service provider (implementing or executing partner) using the LoAs and project funding to carry out advocacy activities; its presence at the SC therefore entailed a conflict of interest. However, a careful reading of the project document reveals that CARI clearly appears as a co-financing partner and not an implementing partner, whereas RADDO is mentioned as an implementing partner. The same project document specifies that all activities identified for RADDO are under the supervision of CARI. The misunderstanding felt by some about the role of CARI arises because there is some confusion between CARI and RADDO. An explanation could have helped to avoid tensions during SC meetings. According to the

the Government of Tunisia, 87 percent for RADDO via CARI, 71 percent for the Government of Mauritania and 112.5 percent for FAO, i.e. an overall average rate of 98.9 percent. These figures were finalised after the evaluation, which supports the analysis presented here.
Evaluation Team, based on the latter clarification, CARI is fully responsible for the project and budget allocations under it. There was therefore no conflict of interest in its presence at the SC, despite statements to the contrary. Moreover, the Evaluation Team did not note any conflict between the different RADDO NGOs that carried out activities on behalf of the project.

104. The Evaluation Team also found that very few partnerships were signed between FAO and partners. Actually, the project signed 5 LoAs: 3 at the regional level with CARI/RADDO and two at the national level (Tunisia) with CRRAO. As a reminder, according to FAO, 40 institutions are involved in the three components of the project with more than 700 people. Fortunately, the project has identified a “designated focal point” for each partner facilitating information exchange with FAO.

105. Finally, the project adapted to changing conditions in order to improve the efficiency of its implementation by relying, in Tunisia and Mauritania, on the experience of Morocco having set up ANDZOA to develop a consolidated advocacy strategy. However, the role of ANDZOA in the advocacy strategy could have been more clearly highlighted in terms of responsibilities and concrete actions to be implemented, particularly as ANDZOA benefits from both a strategy and partnership department, and enjoys sustainable public funding. Furthermore, the lack of adaptive management was felt especially in Component 3 on advocacy. In addition to the actions carried out by the project on this component, other actions with a strong impact could have been carried out at the national level, if national TMCs had been functional.

106. The efficiency of the project, its execution and more specifically the overall quality of project implementation and adaptive management (implementing agency), have been rated by the evaluation team as moderately satisfactory (MS). The project was delayed by 7 months during its implementation. Despite the project extension, at the time of the evaluation – which took place less than one month before the end of the project – the project activities were not fully completed. The project management bodies (as designed by the project with, for example, the absence of TMCs and as implemented – for example, through a SC busier discussing the status of CARI than leading the project Component 3) that were supposed to improve the overall quality of implementation were not functional at the country level. As a result, although the SC was generally functional at the regional level, this did not allow for an adaptive approach to the project.

3.4 Evaluation question 4: Monitoring and evaluation

Was the monitoring and evaluation (M&E) system appropriate for the project? To what extent did the M&E plan prove to be suitable for the project? Was the resulting information useful to the project? Was the design and funding of the M&E plan effective and useful to the project (in terms of achieving objectives and impacts)? To what extent has the implementation of the M&E plan been a success or a failure?

Finding 10. The evaluation found that the project did not put in place a participatory monitoring-evaluation strategy that takes into account all project stakeholders. The monitoring and evaluation component was carried out by the FAO team, namely the Field Programme Support and Monitoring Officer with support from an Operations Assistant. As a result, systematic data collection necessary to monitor the indicators and involving all the project stakeholders did not occur.
In fact, though the traditional FAO M&E system worked, it was not adapted to this project as it further required the involvement of stakeholders in project monitoring to be functional. According to the Evaluation Team, the absence of a functioning monitoring-evaluation system blinded the project to the fact some indicators of Component 3 were not reported. As previously mentioned in section 3.2, the logical framework projected that “1 000 people, including about 100 VIPs, would adhere to the values of the oases through a public declaration at the end of the project”. The project could have carried out a series of strategic reflections for the achievement of this indicator had the monitoring-evaluation system been functional. Overall, the monitoring-evaluation system could have questioned and informed the adaptive management of oases and the smooth running of the activities strengthening it, throughout the implementation of the project. Furthermore, the project M&E system could have noted that some project activities were not fully completed, and that certain good practices, though identified, characterised and well developed, were not shared and disseminated in a coordinated manner in all the countries, despite upstream stages completed on time.

Monitoring-evaluation was noted globally on three aspects, namely: its general quality, its design at the start of the project and its implementation. For the Evaluation Team, these three aspects were unsatisfactory (U). Because no monitoring and evaluation tool adapted to the project was developed or even implemented throughout the life of the project, the numerous SC meetings nevertheless validated the documents produced by the project and gave strategic orientations for the smooth running of the project. Furthermore, the evaluation found that the country focal points worked on a daily basis with each of the stakeholders, but without real national coordination of all the stakeholders.

3.5 Evaluation question 5: Sustainability and gender issues

To what extent will the project outcomes remain useful or continue after the project is completed? What are the main risks that could affect the sustainability of project benefits? Has the project been implemented in a gender-equitable way (in the broad sense) in terms of participation and delivery of benefits?

Finding 11. The Evaluation Team noted that the project has laid the foundations and actions that would serve its (institutional) sustainability and especially the sustainability of its actions after the project. These include capacity building of stakeholders and synergy between public institutions, research, universities, and civil society. However, until the project develops a clear exit strategy coupled with solid financial means, and if it establishes strong connections with policies, these foundations are no guarantee to sustainability.

Gender mainstreaming in the broad sense, and a project’s approach to equity issues enables beneficiaries, especially women, youth and other minorities, to take ownership of a project, thus enabling it to maintain its achievements. Gender and equity issues are therefore one of the guarantors of a project's sustainability. These issues are also directly linked to the GEF’s parameter of political sustainability. Here, gender is integrated into Sustainability through (i) the terms of reference of the evaluation, without this question necessarily being the subject of a section or a note, and (ii) the evaluation questions selected during the validation of the Terms of Reference (ToRs).
109. With regard to GIS sustainability, in Tunisia, the evaluation noted the recruitment of a Geomatics expert, the presence of collaboration agreements between CRRAO and other state structures to provide data. (Section 3.2)

110. According to the Evaluation Team, with regard to the sustainability of good practices and advocacy (Section 3.2), in all three countries, activities related to these were carried out by national and international civil society organisations. This is the case of AOFEP in Morocco, ASOC in Tunisia, Temniya in Mauritania and CARI. All these organisations are part of a network of NGOs operating in the Maghreb oases. Through this network, good practices will be widely disseminated. Also, advocacy tools will be promoted in an effort to continue to raise awareness among the general public and to bring decision-makers to advocate for the cause of oases in the Maghreb.

111. With regard to the dissemination of good practices, ASOC organised in Tunisia, within the framework of these non-project activities, a workshop to disseminate 33 Maghrebian good practices, in the presence of:
   i. eight bearers of good practices;
   ii. ten associations;
   iii. two donors;
   iv. five institutions.

ASOC also took advantage of the Kébili International Date Festival to disseminate them. It also organised an information day on good practices at the Kébili Delegation. These actions, carried out by ASOC, are strongly encouraged and already demonstrate its capacity to ensure the sustainability of Component 2 actions of the project. However, it should be noted that the evaluation team did not have the figures relating to the number and quality of the targets during these campaigns conducted by ASOC, but it announces about 600 people, the majority of whom are in Tunisia.

112. Moreover, human, logistical and political resources are not guaranteed for the implementation of some National Institute for Agricultural Research good practices as they are expensive and beyond the means of most oasis dwellers.

Finding 12. In the three countries, the project is line with major national gender policies.

113. It should also be recalled that the three Maghreb countries adhere to the “Agenda for Equality” which covers several areas of gender issues: institutional anchoring; education; health; basic infrastructure; civil rights and the fight against gender-based discrimination and violence; access to decision-making positions; the fight against gender-based inequalities in the labour market; the fight against forms of vulnerability of women in rural areas and the dissemination of the culture of equality against sexist stereotypes.

Finding 13. Women’s participation in the project could have been better, if a differentiated analysis of the roles of women and men in the management of oasis ecosystems had occurred during project design and development.

114. An analysis of the role of women was not carried out with regard to the sustainable management of oases. Such an analysis could have improved the inclusion of women and
could have added value to the project's outcomes in terms of good practices, advocacy and awareness-raising.

115. Gender mainstreaming in the project design was an important factor in the selection of the Oases to be supported, where women have a central role in productive processes. Gender mainstreaming is also reflected in the project document, which provided for the development of gender-targeted indicators, specific activities and insisted on gender mainstreaming at all stages of the project. This orientation was confirmed during the regional discussion workshop on the project document held in Rabat on 5 May 2015, which recognised that “the integration of the participatory approach and the gender approach is a cross-cutting aspect that was taken into consideration throughout the formulation of the project document”.

116. At the level of project implementation, the analysis of the documentation made available and the brief field visits did not allow to interview women nor to analyse women-made actions carried out to collect information at the lowest level. However, it is known that despite the lack of quantitative data, women are at the heart of agricultural development actions in the Oases, especially with the rural exodus of young people and men to the cities, as work in the Oases is poorly paid. This clearly shows that the actions undertaken by countries to consolidate progress and promote a culture of equality to converge towards greater equity, did not have the same effects in the Oases as in the cities. Because of the demographic weight and the multiple challenges they pose, Oasis women will remain a priority target for gender issues.

117. Nevertheless, the minutes and reports of workshops indicate that women have been present in all workshops, training sessions, country and regional meetings. However, during the evaluation mission, the presence of women was more visible in Morocco and Tunisia than in Mauritania, where the Evaluation Team, during its meeting with FAO stakeholders, met only one woman.

118. With regard to the minimum of five good practices taking into account women’s concerns, in Morocco, according to interviews with AOFEP, the Evaluation Team noted three good practices concerning women. These good practices are focused on the valorisation of aromatic medicinal plants, the production of Alps goat cheese and olive production. In Mauritania, three good practices primarily concern women, namely the valorisation of date palm products and by-products and the breeding of the Guerra goat.

119. Despite the institutional and technical foundations in terms of project sustainability, the evaluation noted a glaring lack of sustainability guarantees on financial and political aspects. The evaluation has rated the sustainability as satisfactory, i.e. the risks are moderately probable. Indeed, according to the project team, certain actions will be put in place to address the missing aspects, in order to effectively guarantee this sustainability. The

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9 A know-how of Tidjikja women which is being lost (It is mainly a Tagant female know-how, it is transmitted from mothers to daughters through generations by practical learning. This apprenticeship is done in the traditional form of solidarity called twiza, which consists in the mutualisation of labour forces).

10 Traditional know-how to be modernised for oasis women (This is an exclusively female activity, from fattening to the marketing of milk and its by-products. Milk processing techniques are transmitted from mother to daughter from a very young age. Thus, they learn how to milk, how to make butter, curdled milk and dried milk. The care and feeding of the livestock is an important part of girls’ timetable.)
Findings

Evaluation Team notes among others the development of new ongoing projects and the project closing workshop which should be carried out against the background of advocacy and lobbying.

3.6 Evaluation question 6: Stakeholder engagement and knowledge management

Were other stakeholders, such as civil society, indigenous people or the private sector involved in the design or implementation of the project? What were the consequences for the project outcomes? To what extent has the project facilitated capacity building, synergy strengthening and knowledge management among the stakeholders involved?

Finding 14. Project formulation was carried out with a high turnout of all stakeholders. Several workshops were held in Tunis and Rabat with a view to interconnecting countries, raising awareness among stakeholders and planning project activities.

120. Thanks to the involvement of several stakeholders (national NGOs, NGO network, institutions and FAO), the project developed several types and levels of partnerships within the framework of this project.

121. The project has indeed set up:
   i. co-financing partnerships – the parties who contributes to the financing of the project: FAO; CARI and the Governments of Morocco, Mauritania and Tunisia; and
   ii. implementing partnerships – national, regional or international parties largely involved in the implementation of project components: ANDZOA in Morocco; Ministry of Rural Development in Mauritania, CRRAO in Tunisia, the Regional Centre for Remote Sensing (CRTEAN) and CARI-RADDO. CRTEAN was the only executing partner not involved in the implementation.

122. All institutions involved in the project implementation benefited from the capacity building activities (training, equipment, etc.) and actively participated in: the collection and exchange of information on oases, the identification and dissemination of good practices in oasis management, and the use of the decision support tools developed or parties concerned by advocacy activities (NGOs, politicians, etc.). In the end, this diversity of stakeholders playing a role in oasis management was of major importance in achieving the project’s outcomes, because the responsibilities of the executing partners are complementary and were identified at the project design phase.

Finding 15. In the three countries, the project has been a real laboratory. With a view to putting in place the three project components on the GIS, good practices and advocacy, the project has truly strengthened stakeholders’ capacity, generated and made available new knowledge. Capacity building and knowledge generation would have been more useful, if the GIS had actually worked in the three countries, if good practices had been shared and disseminated in a coordinated manner, and if advocacy tools had been validated.

123. The table in Appendix 8 shows the status of training conducted under the project as at 31 October 2019. The table shows that the project has organised some 15 workshops. The objective of one of them was to strengthen the capacities of the project stakeholders.
124. **In terms of knowledge management**, the oasis areas are a millennial cradle of resilience and management of resource scarcity. Throughout the ages, the oasis man has developed cumulative and field-proven knowledge. The project addressed the issue of knowledge through Components 1, 2 and 3. For example, the project has produced a list of indicators for GIS data collection, a good practice document listing: the 10 specific good practices selected in Morocco, ten from Mauritania and 13 from Tunisia. At the advocacy level, in addition to the consolidated advocacy strategy at regional and country level, there was one oasis declaration, one film under validation by FAO, five position papers and five information notes. All these productions are important assets for knowledge management.

125. Beyond this identification, the evaluation team notes the absence of a strategy for knowledge management, including the techniques used, and the lack of valorisation of this knowledge within local and regional networks. The expected innovation was to seize the opportunity to also identify resource persons who are the depositories of this knowledge (while identifying good practices), and their mobilisation in the process of transmitting this knowledge to others (especially young people). It was also an opportunity for the project to make the connection between the knowledge conveyed and state programmes that have a regional mandate in terms of extension. Unfortunately, this opportunity was not seized whereas, involving state extension services could have improved the sustainability of Component 2 actions of the project, as these services operate continuously with the state budget.

126. The project was in fact implemented by the co-financing and executing partners. At the level of co-financing partners, CARI – which was identified during project design – also benefited from project funding by supervising RADDO and through LoAs as implementing partner. At the time of the evaluation, CARI which had pledged USD 1 000 000 had already made available USD 875 000 to the project. This same CARI had received USD 427 243 from the project. This dual role of co-financing and executing partner was the subject of several discussions within the Project Steering Committee. It should be mentioned that this dual status already existed in the ProDoc jointly validated by GEF and the three beneficiary countries of the project. In addition, part of the project funding received by CARI was dedicated to RADDO’s NGOs. Thus, RADDO was also an executing partner of the project through CARI. This institutional set-up reflects that of the ProDoc. However, according to the evaluation team, from a good governance perspective, if the project had dealt directly with RADDO’s NGOs on the basis of a decision of the SC, there would not have been the misunderstanding that arose from the institutional set-up validated by the ProDoc. Based on this, stakeholder engagement has been rated as moderately satisfactory (MS).
4. Conclusions and recommendations

4.1 Conclusions

Conclusion 1. Relevance: The project remained relevant throughout its implementation in terms of the themes addressed, the expected results, the stakeholders identified, the project area and its coherence with government, FAO and GEF strategies.

127. The project relating to the adaptive management and monitoring of oasis systems in the Maghreb responds to the needs of the target countries (Morocco, Mauritania, Tunisia), and the stakeholders identified since its design phase and throughout its implementation. It is not only consistent with the international conventions signed and ratified by the three countries, the policies, strategies and programmes of each country, but also its intervention is aligned with GEF and FAO priorities. According to the evaluation team, the project remained relevant in: the choice of oases as the main theme; the choice of pilot sites to test the decision-support tools; the three expected results and the overall implementation approach with its regional, Maghreb level, vision; and the reliance on CSOs to implement two project components.

Conclusion 2. Effectiveness: The project aimed at improving, expanding and sustaining the adaptive management and monitoring of oasis systems in the Maghreb. In terms of concrete achievements, with the exception of the monitoring-evaluation one, all project components were implemented but with heterogeneous results.

128. For example, for component 1, the project aimed at providing a comprehensive and systematic response to the particularly complex issue of oases by collecting and entering all oasis data into a GIS platform; this to ensure full-scale monitoring and provide timely responses. Focusing on this first component, the evaluation found that, in relation to the time and means available, the project quickly circumscribed its intervention geographically (2 sites per country). To date, the project has not completed the action to operationalise the decision support tools (which are the GIS of the three countries), although in Tunisia, significant and satisfactory progress has been noted. There is probably an imbalance between the project's ambitions and its financial means (see Conclusion 3).

129. With regard to Component 2, good practices are identified and well formulated, but translation into Arabic (although Berber is still an important local language in Morocco) and wide popularisation and dissemination have yet to occur.

130. At the level of Component 3, several advocacy tools were produced through a participatory process involving the national and regional levels through workshops. Position papers, information notes and a consolidated strategy on advocacy exist at the national and regional levels. For the ET, it appears that advocacy actions have been more focused at the international level than in the project countries and even less at the regional level. These advocacy actions could have been more extensive, if their construction process had simultaneously taken into account the development of materials and simple actions such as: radio and television broadcasts, conferences and debates at the national level. In addition, the creation of alliances with other groups, organisations or individuals committed to supporting the oasis cause, could have been a valuable asset. Finally, the project did not put in place a mechanism for monitoring (a process to collect information
to measure progress towards advocacy objectives) and evaluation (a process to collect and analyse information to determine whether the advocacy objectives have been achieved).

Conclusion 3. Efficiency: There is probably an imbalance between the project's ambitions and its financial means. The analysis of the objective and results by the evaluation team indicates that it was an ambitious project in view of the total amount of the project.

The efficiency of the project, its execution and more specifically the overall quality of project implementation and adaptive management (implementing agency), have been rated by the evaluation team as moderately satisfactory (MS). The project management bodies that were supposed to improve the overall quality of implementation, were not functional at country level. This prevented an adaptive approach to the project although the SC was functional at regional level. The ambitions of the project (full-scale monitoring of the oases through the project GIS) over a two-year period with an FAO budget of USD 1,726,484 and despite contributions from each of the governments (see Appendix 2), overly optimistic according to the evaluation team.

Conclusion 4. Monitoring and evaluation: No monitoring and evaluation of the project has been carried out at the national level. The project, multi-stakeholder in nature, had to design an appropriate monitoring and evaluation system. Regrettably, the monitoring-evaluation component was carried out solely by the FAO team. This classic M&E system could not play the role assigned to the technical monitoring committees at the national level, which unfortunately were not set up.

These M&E systems, as initially planned by the project, would have improved the management of the project through proposals made by all the stakeholders involved in these project management bodies. At the regional level, the evaluation noted the holding of 05 steering committees, exceeding project expectations. At the national level, the evaluation noted working sessions between the project focal points and their stakeholders.

Conclusion 5. Sustainability: Component 1 of the project was implemented by institutional stakeholders and Components 2 and 3, by national and international civil society. These two types of stakeholders together constitute an important force for the sustainability of the project actions.

Beyond the commitments made, these stakeholders feel the need to use and develop project achievements for the further sustainable management of oasis. With regard to sustainability, both socio-political and institutional, the management of oases has been entrusted to stable state institutions; this guarantees the likelihood of this sustainability. The same has been applied at the environmental level, where the project actions have rather contributed to strengthening environmental sustainability. Nevertheless, the financial sustainability of the project is not guaranteed, although at the time of the project evaluation, new project initiatives were being formulated; none had yet secured the financial resources necessary for the continuation of the project.

Conclusion 6. Gender: The project included specific indicators for women, youth and men (same indicator, differentiated data collection) and the implementation team took them well into account. However, the evaluation highlighted the lack of differentiated analysis on the role of women and men in the management of oasis ecosystems. The project's gender-related indicators could have been improved if this differentiated analysis had been carried
Conclusions and recommendations

out. Indeed, it would have allowed the definition of more relevant actions, allowing for greater involvement of women and youth.

134. Women were present in all project activities. In view of the important role women play in the management of oasis ecosystems, and the issues of young people and men’s exodus to cities from oases, specific advocacy actions on these important and widespread issues could have taken place during project implementation.

Conclusion 7. Stakeholder engagement: The project’s stakeholders were well targeted at both regional and national levels with one exception: the project could have avoided CARI’s dual status as co-financing and implementing partner, if the project had directly identified RADDOS’s NGOs (as implementing partner) at the time of project design.

135. The project was in fact implemented by the co-financing and executing partners. At the level of co-financing partners, CARI – which was identified during project design – also benefited from project funding through LoAs as implementing partner. At the time of the evaluation, CARI which had pledged USD 1 000 000 had already made available USD 875 000 to the project. This same CARI had received USD 427 243 from the project. This dual role of co-financing and implementing partner was the subject of several discussions within the Project Steering Committee. It should be mentioned that this dual status already existed in the ProDoc jointly validated by GEF and the three beneficiary countries of the project. In addition, part of the project funding received by CARI was dedicated to RADDOS’s NGOs. Thus, RADDOS was also an executing partner of the project through CARI. This institutional set-up reflects that of the ProDoc. However, according to the evaluation team, from a good governance perspective, if the project had dealt directly with RADDOS’s NGOs on the basis of a decision of the SC, there would not have been the misunderstanding that arose from the institutional set-up validated by the ProDoc. Based on this, stakeholder engagement has been rated as moderately satisfactory (MS)

Conclusion 8. Knowledge management: The project has produced several documents that are relevant to knowledge management. Only some of these documents have not been sufficiently disseminated for good ownership by the direct beneficiaries.

136. The project has produced a list of indicators for GIS data collection, a good practice document listing: the 10 specific good practices selected in Morocco, 10 from Mauritania and 13 from Tunisia. At the advocacy level, in addition to the consolidated advocacy strategy at regional and country level, there was one oasis declaration, one film under completion, five position papers and five information notes. All these productions are important assets for knowledge management.

137. Beyond these productions, the absence of state extension services should be noted. These would have better valorised all this knowledge within the framework of their sovereign function, as they operate continuously with the budget of the states.

4.2 Recommendations

To FAO:

Recommendation 1. Introduce oasis data into FAOSTAT.

138. In view of the role of oases as a crossroads of civilisations and a fundamental model of sustainability, it is important for FAO to establish an oasis data management system within
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FAOSTAT. The setting up of this database will go beyond the three project countries and facilitate information exchange; it will also consolidate sustainable management approaches between the countries hosting the oases, based on the experiences and good practices underway in each of the countries. It will also make it possible, in the event of a lack of resources or stable GIS hosting, to maintain the project’s achievements.

Recommendation 2. Establish bridges between projects under development.

139. Create synergy between this finalised project and other oasis management initiatives such as the Oasis Sustainable Development Project (OSDP) in Mauritania, the World Bank sub-regional project currently under development in Tunisia and the FAO Green Fund project, also under development in Tunisia. These programmes under preparation (second phase of OSDP), could build on this project’s outcomes by continuing, for example, to consolidate the GIS database, the dissemination of good practices and advocacy actions on oases.

To FAO and the GEF/FAO Unit:

Recommendation 3. Develop an effective exit strategy for the project.

140. Beyond stakeholder commitments to ensure sustainability, the project must develop a real exit strategy with an implementation plan that will be based on, among other things, the following ideas:

i. continued advocacy with key public institutions to improve their budgets in favour of the oases;

ii. involvement of decentralised local authorities, elected officials and universities, starting already with the project’s closing workshop;

iii. planning of actions to be implemented;

iv. continued high-level lobbying and advocacy (at international level) to mobilise funding to serve the cause of oases.

141. All the project objectives are in progress: the expected impacts can only be achieved if all of them are met. This is why it is capital to develop during the course of the project a strategy to mobilise additional funding for: the assignment of tasks, the shared responsibility of services and beneficiaries, and the capitalisation, formalisation and communication of project actions. It would be desirable to let AMU or Sahara and Sahel Observatory (OSS) continue and take over the GIS work carried out to date in terms of its operationalisation and establishment in the decision-making bodies of the countries, the popularisation of good practices, and advocacy.

Recommendation 4. Develop the operating accounts of expensive good practices.

142. Regarding the dissemination and implementation of good practices, FAO in the short term needs to identify good practices that are costly and to produce accurate operating accounts and/or budgets, so that the beneficiaries have a comprehensive picture of the cost-benefit pertaining to the good practice.

To institutions hosting the GIS:

Recommendation 5. Set up a formal and binding data collection system to feed the GIS.
143. In order to ensure the functioning of data collection to feed the GIS, the project focal points must set up a formal and binding system of data collection with the other stakeholders, with a view to guaranteeing the functioning of the GIS and to especially ensure data updates.

To the civil society involved in the project:

**Recommendation 6. Valorize good practices and advocacy documents within RADDO and other civil society networks.**

144. Project component 2 and 3 were implemented by national and international civil society. This civil society is already part of a large and important network dealing with the sustainable management of oases. This network therefore offers an opportunity to promote good practices, and to consolidate the advocacy strategy and other advocacy tools developed within the framework of the project. However, in order to be more accessible to the beneficiaries, these good practices need to be translated into Arabic and other languages.
Bibliography


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