

Final evaluation of the  
project "Conservation of  
biodiversity and mitigation  
of land degradation through  
adaptive management of  
agricultural heritage systems"

**Project Evaluation Series  
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**Final evaluation of the project  
“Conservation of biodiversity and  
mitigation of land degradation through  
adaptive management of agricultural  
heritage systems”**

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## Acronyms and abbreviations

ADA	Agency for Agricultural Development
ANDZOA	National Agency for the Development of the Oasian Areas and the Argan
APDESPS	Agency for the Promotion and Economic and Social Development of the Provinces of the South of the Kingdom
AUEAs	Agricultural Water Users Association
CBD	Convention on Biological Diversity
DDFP	Directorate for the Development of Value Chains
DIAEA	Directorate of Irrigation and Management of Agricultural Land
DPA	Provincial Directorate of Agriculture
EIG	Economic interest group
FAO	Food and Agriculture Organisation of the United Nations
GEF	Global Environment Facility
GIAHS	Globally important agricultural heritage system
HCEFLCD	High Commission for Water, Forests and the Fight against Desertification
INRA	(French) National Institute for Agricultural Research
IPA	Important Plant Areas
IUCN	International Union for Conservation of Nature
MAPMDREF	Ministry of Agriculture, Fisheries, Rural Development, Water and Forests
MEMDR	Ministry of Energy, Mines and Sustainable Development
NBSAP	National Biodiversity Strategy and Action Plan
ONCA	National Agricultural Advisory Board
ONSSA	National Office of Food Safety
ORMVATAF	Regional Office for Agricultural Development of Tafilalet
PMV	Green Morocco Plan
PRODOC	Project document
PTRC	Territorial Plans against Global Warming
RPMC	Regional Project Management Committees
SDOQ	Distinctive Signs of Origin and Quality

## Executive summary

1. This report serves as the final evaluation of the project "Conservation of biodiversity and mitigation of land degradation through adaptive management of agricultural heritage systems". The project is funded by the Global Environment Facility (GEF) with the contribution of the following stakeholders: the Government of Morocco through its multiple Action Plans; the effective involvement of the technical units of the central, regional and provincial Directorates of the Ministry of Agriculture, Fisheries and Rural Development (MAPM), and Water and Forests (MAPMDREF); and the participation of the populations of the various communities covered by the project.
2. The project evaluated aligns with national objectives for the protection and enhancement of biodiversity, particularly with regard to improving the conservation and sustainable management of five oasis systems. The project specifically targets the revival of these sites and the strengthening of their role in household food security, their role of preserving agricultural biodiversity and their role in contributing to natural, landscape and cultural heritage.
3. The evaluation is based on available documentation, interviews in Rabat with central institutions, and interviews with regional, provincial and local stakeholders in the five project sites.

## Findings

4. **Relevance:** According to the evaluation team, the relevance of the project is proven in relation to Morocco's strategies and its relations with the Food and Agricultural Organization of the United Nations (FAO) and GEF; nevertheless, it could have been strengthened with a more balanced intervention logic in terms of its objectives and the duration of its implementation. Its aim to act exhaustively on multiple objectives, results and stakeholders in areas as varied as biodiversity and pure research or the implementation and development of activities, worked against the relevance of the project. A rebalancing and better focusing of activities would have favourably influenced its effectiveness and impacts.
5. **Effectiveness:** The project carried out the majority of its capacity building activities for conserving and reducing the use of natural resources. However, out of 60 planned activities, 21 are incomplete – added to the fact that the cooperatives supported by the project have not all reached a certain level of autonomy, that their coaching is not finalised (National Agricultural Advisory Board [ONCA], coaching) and that the objective of adopting the "organic" quality approach and strengthening the means of control has not been fully achieved.
  - i. With regard to **Component 1**, the expected outcome has not been fully achieved. The catalogue of databases (Output 1.1), the implementation of a regulatory framework (Output 1.2), as well as training and networking sessions (Output 1.3), did not fully establish "biodiversity conservation" through the enhancement of local knowledge, the know-how of populations, and biodiversity as a regulated strategy framed by an inter-professional network to help small farmers in Oases gain capacity to adapt to climate change and resilience. This is the beginning of a process whose final outcome depends on actions to come.



- ii. Concerning **Component 2**, activities were carried out to improve and rehabilitate cropping systems by applying: good practices in sustainable land and water management targeting the reversal of land degradation trends (Output 2.1); flood control and measures taken against land degradation/desertification (Output 2.2); and efficient water use and hydro-agricultural development measures based on traditional irrigation systems (Output 2.3). All project outputs are likely to improve land use conditions.
  - iii. Concerning **Component 3**, it is worth noting that one of the innovations of Project MOR 044 is to have tried to integrate the notion of biodiversity in oases. Thanks to innovation, biodiversity would have been given greater attention in the markets, notably through organic labelled agriculture. Practices have been implemented, but the outcome has not yet been achieved as there is no evidence of economic diversification in oasis landscapes. Due to a lack of time and the late start of the project, several activities (10 out of the 25 in this component) are still not completed.
  - iv. As concerns **Component 4**, monitoring and evaluation is based on four dimensions detailed below:
    - i. *Overall quality of the partners' involvement:* The project has weaknesses in communication, both external and internal, and the institutions concerned have had little or no information about the project and wish to be informed.
    - ii. *Overall quality of the monitoring-evaluation system:* There is a lack of synthesis and the monitoring of the project is largely based on the memory of the individuals who worked on it rather than on the monitoring-evaluation system (see Output 4.1).
    - iii. *Monitoring-evaluation, design at the beginning of the project:* This is satisfactory; however, the evaluation team regrets the lack of a mid-term evaluation.
    - iv. *Monitoring-evaluation, and implementation:* Despite a continuous exchange of information between the project coordination, the national focal point at INRA and the partners of the five sites, communication on the project leaves some institutional partners in the dark.
6. **Efficiency:** The project suffered from delays in start-up (the CEO validated it on 9 January 2014. It was only on 27 May 2015 that the PPRC was validated and the project effectively started on 1 April 2016), and this was a determining factor in its performance. In terms of the overall quality of implementation and adaptive management, the complex business plan turned out to be adequate, although weaknesses in communication should be pointed out. As for the quality of implementation, it is deemed satisfactory, although better civil society organisations involvement could have had a positive impact on the project and alleviate some of the communication challenges encountered.
7. **Sustainability:** Many project activities remain incomplete (out of the 60 planned activities, 21 were not completed at the time of the final evaluation); this casts doubt on the sustainability of the project's achievements. However, thanks in particular to ANDZOA's commitment and remit for the project and its approach, the evaluation team does not question the sustainability of the project
8. **Impacts:** Impacts are perceptible but remain linked to the capacity of the project to maintain high levels of support and technical assistance. The absence of an exit strategy and a post-project Stakeholder Plan may reduce the expected impacts. Thanks to the

project, new dynamics of production and, above all, of consultation and integration have been initiated. Planning and decision-making support tools are increasingly used by the stakeholders in charge of biodiversity both in general and more specifically in Oases. Several new initiatives, partnerships and mechanisms have been launched thanks to the project, in particular the Globally important agricultural heritage system (GIAHS) accreditation, which was closely associated with it (see Finding 2, and Finding 20)

9. **Cross-cutting dimensions:** Partnerships with/without civil society organisations have not had the desired effects despite multiple GEF projects and the fact that many of these are already underway or have planned to maintain development actions in the oasis areas. It should be noted that specific knowledge management activities have not been carried out, and the gender approach has not been very visible.
  - i. **Gender issues:** The gender approach was not very visible throughout the life of the project as a founding aspect. Unfortunately, there was a lack of a data collection system during project implementation for gender analysis. At the level of each activity, especially with regard to training, an effort was made to include women. However, due to the role of Moroccan women in agriculture, the evaluation team considers that the gender issue was only superficially addressed and notes that the participatory work and dissemination of results is not documented.
  - ii. **Engagement of on part of civil society organizations:** It was only during the implementation of project activities that the quality of the envisaged partnerships with civil society turned out not to be in line with the project document. There was no real collaboration with civil society organizations, which are supposed to partake in Regional Project Management Committees (RPMCs) and the Country Programming Framework [CPF]) as recommended by the project designers. On the basis of the interviews conducted and the project documentation, there were no regional associations or civil society structures recognized at the level of the regions affiliated to the project.
  - iii. **Knowledge management:** The project generated very important, relevant and specific knowledge (start of a database, good practice training, see Appendix 6 for a complete list). However, the management of this knowledge fell short mainly because there was no communication strategy and no stakeholder engagement plan. The result was a communication deficit at all levels: local, regional and national.

## Conclusions

**Conclusion 1. The project is innovative and appropriate.** The project has offered this opportunity, to carry out for the first time in oases, an action integrating at the same time: actions of land use planning, conservation of indigenous knowledge and know-how, maintenance of oases and enhancement of the productive system. However, the project and its relevance could have been strengthened by a more balanced intervention logic in terms of its objectives and the duration of its implementation; yet, the contribution to the current political discourse on oases and the pioneering role in the use of GIAHS certification are important achievements.

**Conclusion 2. The project relies on GIAHS certification to achieve its objectives: because of delays in start-up as well as the dispersed and landlocked nature of the sites, all certification processes – although initiated and ongoing – have not been completed, creating differences in timeliness.** The efforts made by the project for GIAHS labelling of oases has resulted in the

recognition of the Imilchil-Amellago and Ait Mansour sites. The sites of Figuig and Akka are almost GIAHS certified. The impact of the project, due to the choice of sites, is therefore very heterogeneous. Thanks to the GIAHS initiative, these sites can not only attract national and foreign investment to boost their conservation activities but also set up mechanisms to mobilise funding, such as payments for ecosystem services or the application of the polluter pays principle.

**Conclusion 3. Labelling. Despite its delays, the project helped achieve organic agriculture on the project sites, though not always certified. Territorial labelling encourages local initiatives for biodiversity conservation and sustainable use.** Public authorities have a significant role to play, alongside label managers, in supporting small producers in these market segmentation strategies and in working with them towards national sustainability objectives through public procurement or changes in regulations. The limited financial means of producers in traditional oases may hinder product certification, given that some producers find the recurrent certification costs expensive.

**Conclusion 4. Access to markets/improvement of living standards. Apart from crop labelling (Conclusion 3), the project aimed to promote biodiversity integration into markets, notably through organic labelled agriculture. But several activities are still uncompleted, compromising the project's effectiveness.** The project has linked biodiversity conservation with the improvement of farming conditions of soil, water and genetic material resources, in order to improve the economic and social situation of the beneficiaries. The project sought to integrate biodiversity conservation and sustainable use into the local strategies for economic diversification in the oasis landscape, but it was unable to achieve this.

**Conclusion 5. The project suffers from poor communication both externally and internally.** Internally, the project has set up a centralised information system at the French National Institute for Agricultural Research INRA and FAO in Rabat. The information that feeds this system comes from very important surveys concerning all physical, human, management, and production aspects in Oases. However, with the exception of Tiznit, the database is not installed in the other DPAs (Provincial Directorate of Agriculture) nor in ORMVATAF (Regional Office for Agricultural Development of Tafilalet) despite the fact that all these surveys were carried out by the staff of these institutions. Added to this are the difficulties of institutional communication and the lack of real collaboration with the civil society organisations that are supposed to partake in RPMCs and the SC.

**Conclusion 6. As progress on the sites is uneven, the sustainability of the project interventions is also uneven regardless promotion of oasis cultures needs to be supported and sustained.** Concerning the promotion of local products, it should be emphasised that one of the key actions of the project is the integration of producers in organic agriculture, requiring skills acquired and transmitted by the project. For this reason, the conservation cycle addressed by the project is in its early stages. Its sustainability depend on: the income achieved by the producers (depending on an uncertain market opening, see Conclusion 4); their capacity to bear the financial costs of the label (see Conclusion 2); and the interventions of the agricultural advisory services (adequate technical assistance).

## **Recommendations**

**Recommendation 1. Strategic and organisational aspects (based on Conclusions 2 and 5, addressed to FAO, GEF, the Government, and partner organisations) – Capitalise and disseminate/expand the GIAHS initiative, the tools developed and implemented within the**

**framework of Project MOR 044 and its outreach to all sustainable development stakeholders in oases; generalise this approach.**

**Recommendation 2. Socio-economic aspects (based on Conclusions 3 and 6, addressed to FAO, GEF and ANDZOA) – Build technical, financial, commercial and economic management capacities related to income-generating activities through technical and financial feasibility studies, in order to enable full autonomy after five years of support; finance at 100% the certification of oasis products through the Agricultural Development Fund.**

**Recommendation 3. Environmental governance aspects (Based on Conclusions 1 and 6 addressed to FAO, GEF, and the Government) – Effectively integrate civil society organisations in biodiversity and sustainable development actions and make them a privileged and essential partner.**

**Recommendation 4. Communication aspects (Based on Conclusion 5, addressed mainly to FAO and GEF) – Promote better institutional communication on other projects, but above all, support communication efforts on biodiversity and sustainable development in partnership with the Government, so as to maintain and deepen the project's achievements.**

## **Lessons learned**

10. The delays in the implementation of project activities and, especially, in supporting producers until the achievement of the first outputs, were mainly due to: (i) the time lag between the drafting date and the signing date of the convention by FAO; (ii) the mobilisation of co-financing; and (iii) technical coordination, which changed after one year of operation without being able to ensure the effective start of the project. As a result, the schedule has been constantly adjusted to remedy this situation. There were delays in activities supporting farmers who engaged in organic production. Support was planned until authorisations are obtained and initial crop sold.
11. The lessons learned from this project, which can be applied to other similar projects, are as follows:
  - i. A logical framework that is oversized in relation to the duration of the activities and that includes a participatory working approach with beneficiaries and CSOs, requires a longer time frame.
  - ii. Conducting numerous studies, without first checking with partners and international cooperation agencies whether or not such studies have previously been carried out, does not serve the effectiveness of the project (double work).
  - iii. The lack of a Stakeholder Engagement Plan and institutional changes (change of the lead technical officer [LTO]) made it difficult to address the ad hoc needs of the beneficiary population and favoured upstream work, focused on training and studies, carried out by external expertise, all of which was at the expense of the output initially planned.
  - iv. Current extension of date palm plantations within oases, new construction and modern techniques all require a labour force as well as the setting up of valuation and packing units by the private sector. In order to reduce land pressure in oases, it would be interesting to analyze the possibility of prohibiting disorderly building in this area and to orientate urbanization towards uncultivated land which is very abundant in oases.

## GEF rating criteria table

FAO - GEF rating criteria	Rating	Comment of the evaluation team
<b>1) Relevance</b>		
Overall relevance of the project	HS	Proven relevance to Morocco's strategies and its relations with FAO and GEF.  The relevance of the project could have been strengthened by a more balanced intervention logic in terms of its objectives and the duration of its implementation.
<b>2) Effectiveness</b>		
Overall assessment of project outcomes	MS	The project carried out the majority of its capacity building activities for conserving and reducing the use of natural resources. However, some activities remain "incomplete" activities (and not insignificant ones): The cooperatives that were previously supported by the project have not reached a basic level of autonomy, the coaching has not been finalised (ONCA, coaching), and the objective of adopting the "Organic" quality approach and strengthening the means of control cannot be considered as fully achieved.
Output 1: Improvement of the regulatory framework	MS	The expected outcome has not been fully achieved. The catalogue of databases (Output 1.1), the implementation of a regulatory framework (Output 1.2), as well as training and networking sessions (Output 1.3), did not support "biodiversity conservation" through the enhancement of local knowledge, the know-how of populations, and biodiversity as a regulated strategy framed by an inter-professional network to help small farmers in Oases gain capacity to adapt to climate change and resilience.
Output 2: Reduced degradation of natural resources	S	The outputs of Component 2 were carried out to improve and rehabilitate cropping systems by applying: good practices in sustainable land and water management targeting the reversal of land degradation trends (Output 2.1); flood control and measures taken against land degradation/desertification (Output 2.2); and efficient water use and hydro-agricultural development measures based on traditional irrigation systems (Output 2.3). All project outputs are likely to improve land use conditions in oases; they promote and will continue to promote the sustainable use of natural resources after the project's completion.
Output 3: Biodiversity integration into markets	MU	Suffered from the late start of the project. Some activities are still uncompleted; this explains why the rating for this component is just Moderately Unsatisfactory, while the completion of other activities is deemed satisfactory.
<b>3) Efficiency, implementation and execution</b>		
Overall quality of project implementation and adaptive management (implementer)	S	The financial arrangements for mobilising complex technical assistance turned out to be adequate, although weaknesses in communication should be pointed out.
Quality of execution (executing agent)	S	It is worth noting that a better involvement on the part of civil society organisations could have had a positive impact on the project and alleviate some of the communication challenges encountered.
Efficiency (including cost and time efficiency)	MS	Overall, the project suffered from delays in start-up, which was a determining factor in the project's performance.
<b>4) Sustainability</b>		

FAO - GEF rating criteria	Rating	Comment of the evaluation team
<b>1) Relevance</b>		
Overall sustainability	ML	Many activities are still to be completed, but given ANDZOA's remit, all the public parties concerned by oases will be mobilised for sustainable local development and, above all, for the maintenance and generalisation of the project's benefits.
<b>5) Factors affecting performance (Monitoring-evaluation and involvement of partners)</b>		
Overall quality of partner involvement	MS	Several partners at the central level did not carry out activities under their own responsibility.  Lack of civil society organisation (CSO) involvement in project design and implementation.
Overall quality of monitoring and evaluation	MU	The project, with its multiple stakeholders at central, regional and local level, was carried out in a very large space, implementing various activities, very often co-financed by the national budget. The activities were carried out according to the specific commitment, implementation, control and payment procedures of each institution, and did not always allow all stakeholders to have all the information at the right time and with the requested quality.
Monitoring-evaluation, design at the beginning of the project	S	There is a lack of synthesis and the monitoring of the project is largely based on the memory of the individuals who worked on it rather than on the monitoring-evaluation system (see Output 4.1).
Monitoring/evaluation, implementation	MU	Despite a continuous exchange of information between the project coordination, the national focal point at INRA and the partners of the five sites, communication on the project leaves, as earlier said, some institutional partners in the dark.

# 1. Introduction

1. This report serves as the final evaluation of the project 'Conservation of biodiversity and mitigation of land degradation through adaptive management of agricultural heritage systems'.
2. The project is funded by GEF with the contribution of the Government of Morocco through its multiple Action Plans, especially the Green Morocco Plan (GMP) and the involvement of the technical units of the central, regional and provincial Directorates of the Ministry of Agriculture, Fisheries and Rural Development, and Water and Forests (MAPMDREF). It also relied on the participation of the populations of the various communities concerned by the project.
3. The project was implemented by the implementing partner "French National Institute for Agricultural Research (INRA)" with: i) the Directorates of the Ministry of Agriculture, Maritime Fisheries, Rural Development, Water and Forests, namely the Agency for Agricultural Development (ADA) and the National Agency for the Development of Oasian Areas and the Argan (ANDZOA); ii) the Agency for the Promotion and Economic and Social Development of the Provinces of the South of the Kingdom (APDESPS); iii) Food and Agricultural Organisation of the United Nations (FAO) and the Global Environment Facility (GEF); and iv) local stakeholders.
4. The project activities were implemented from April 2015 to December 2019 in five sites located in the "International Union for Conservation of Nature" (IUCN) areas, namely:
  - i. Imilchil – Amellago, site located in the Eastern High Atlas Park (RAMSAR Site and Important Plant Areas- IPA);
  - ii. Assa, Akka and Figuig sites located in the Oasis Biosphere Reserve; and
  - iii. Ait Mansour, site located in the Argan Biosphere Reserve.
5. Structure of the report: This evaluation report is divided into four parts. The first part is an introduction to the evaluation exercise and is followed by a second part detailing the project to be evaluated and its context. In its third part, the report presents the data collected in a participatory manner and the findings of the evaluation team to answer the evaluation questions. In its fourth and last part, the report proposes recommendations and lessons learned, in addition to the conclusions resulting from this project analysis. A series of appendices prepared in accordance with GEF requirements is found at the end of the report.

## 1.1 Purpose, scope and potential users of the evaluation

6. The final evaluation of MOR 044 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, but more importantly to learn from the activities. The purpose of this evaluation is threefold:
  - i. transparency (or accountability), through the assessment of the project progress, particularly in terms of the outcomes achieved in relation to the set objectives, and the efficiency and effectiveness of its implementation;
  - ii. to propose improvements needed to achieve the expected results for similar projects;

- iii. to identify lessons learned during the implementation of the project.

**Table 1: Main purposes and intended users of the evaluation**

Purpose		Users
<b>Transparency:</b> In order to meet the information needs and interests of policy makers and other stakeholders with decision-making powers.	Inform decision-making Be accountable for transparency	Donor (GEF) FAO Management Government of Morocco
<b>Improvement:</b> The improvements proposed by the evaluation to the project and the organisation provide valuable information to those in charge of the project operations or similar projects.	Improve the project or similar projects	GEF Coordination Unit Project working group GEF project designers
<b>Learning:</b> A thorough understanding of the project and its practices normally meets the needs and interests of the project staff and sometimes participants, while deepening their knowledge of the project and the issues addressed.	Contribute to knowledge	FAO staff and future staff responsible for project and programme development or implementation.

7. The evaluation covered all activities implemented since the start of the project, from April 2016 to December 2019. The evaluation consulted and integrated the opinions of beneficiaries and stakeholders at the central, regional, provincial and local levels in the five project sites.
8. The evaluation aims to provide the partners (Government of Morocco, GEF, FAO and all stakeholders) with information to help them:
- i. have a comprehensive and independent assessment of the outcomes, with a particular focus on the actions carried out in relation to their objectives;
  - ii. draw the main lessons of the intervention and make practical recommendations to improve future actions.
9. In concrete terms, the aim is to assess the various objectives and outcomes (quality of project achievements and progress made) using an approach per major component and to evaluate them according to the criteria in force in this field.<sup>1</sup> This will take into account all the activities carried out by the project.
10. In addition, the GEF requests that special attention be paid to certain areas/issues that are of priority concern to the project and its implementation context, including, amongst others: the analysis of the gender issue; an assessment of the level of involvement and management qualities of civil society organisations (CSOs) and farmers' organisations in the project; and the management of knowledge generated by the project.

<sup>1</sup> These criteria are: relevance, efficiency, effectiveness, sustainability, impact and monitoring/evaluation of project implementation.



## 1.2 Evaluation objectives and questions

11. Evaluation questions were used to focus the evaluation work on a number of key issues, in order to allow for more focused information collection, more in-depth analysis, and more useful reporting. At the beginning of the mission, during the documentation phase, a list of evaluation questions was drawn up; these questions cover all the evaluation criteria selected and provide an overall assessment of the project. Each of these questions is accompanied by specific judgment criteria and indicators. The table of evaluation questions, also referred to as the evaluation matrix, is presented in Appendix 4.
12. As stated in the terms of reference (ToR), the final evaluation questions should correspond to the six GEF evaluation criteria, in order to analyse the progress of the project. Each criterion has been assessed in terms of the outputs achieved and has been rated in accordance with GEF requirements; the scale used for the rating of each criterion is presented in Appendix 1.

**Table 2: Evaluation criteria and questions**

Evaluation criteria	Evaluation questions
1. The <b>relevance</b> of the project approach to: beneficiaries, the national context, GEF and FAO, and the needs of the countries and communities;	How do the project objectives and activities related to biodiversity conservation and mitigation of land degradation through adaptable management of agricultural heritage systems fit into national, GEF and FAO priorities in Morocco?
2. the <b>effectiveness</b> of the project, in terms of achieved, anticipated or unattainable results in each project component;	To what extent have the set objectives and outcomes and the planned activities been achieved and carried out?
3. the <b>efficiency</b> of the project operation, in terms of implementation of activities and achievement of planned objectives, management and monitoring/evaluation of activities;	To what extent are the desired effects achieved with the least possible resources (funds, expertise, time, administrative costs)?
4. the <b>sustainability</b> of the project;	To what extent will the benefits resulting from the project continue after its closure resisting risks in the long term?
5. <b>other factors impacting on the implementation</b> of the project and in particular, the partnerships developed or to be envisaged;	What significant changes has the project made at its closure and what steps have been taken to progress towards long-term impacts?
6. <b>cross-cutting dimensions</b> such as gender and minority group issues.	To what extent are gender issues (broadly defined) and CSO involvement taken into account in project design and implementation?

## 1.3 Methodology

13. **Methodological approach:** The overall methodological approach was divided into three successive phases (see Table 3) and consisted of:

- i. a literature review phase to understand the project as well as the achievements made to date (as reported) and develop evaluation questions;
- ii. a field phase: to collect information in a participatory approach with the project and the beneficiaries and always focused on the expected outcomes; encourage collaboration; and sound out the contributions of each one, emphasising on the beneficiaries and local institutions (sustainability of activities and investments, quality of management and future projects), where possible through a focus group approach;
- iii. a synthesis phase to verify<sup>2</sup> and "triangulate" the data through: reports and documentation provided and collected during the evaluation mission, findings collected and directly established by the evaluation team in the field, statements from producer groups, and any other information collected during interviews with the project partners.

**Table 3: The three phases of the evaluation**

Steps	Purposes	Outputs (Deliverables)
Literature review phase	Review of key documents; drafting and analysis of evaluation questions; development/refinement of the methodology; scheduling of evaluation work. This work is carried out mainly on the basis of official FAO documents available on FPMIS.	Initial report
Field phase	Data collection, actual investigations; presentation of the first conclusions; collection of comments. This work was carried out in the localities concerned by the project.	Presentation of findings and first conclusions
Synthesis phase	Drafting of the interim evaluation report. Drafting of the final report on the basis of the comments.	Final evaluation report

14. The literature review phase is essentially structured around the project document, semi-annual and annual reports, and mission reports carried out under this project.
15. Evaluation team and mission: The evaluation was conducted by a team of two evaluators: Mr Mohammed Bajeddi, team leader and Mr Hassan Kamil, team member. The findings and conclusions drawn, as well as the recommendations arising from them and presented in the report, are based on available documentation, interviews conducted in Rabat with central institutions, and interviews with at regional, provincial and local stakeholders. The two-week field mission took place in accordance with the ToR requirements and the evaluation expectations. It took place from 23 September to 4 October 2019; a detailed list of the stakeholders interviewed can be found in Appendix 3. During this mission, the evaluation team gathered the views of FAO, national institutions such as ANDZOA and INRA, as well as decentralised institutions in four of the five project provinces (Er-Rachidia chief town of the region,<sup>3</sup> Tiznit, Tata and Assa - see Figure 2).

<sup>2</sup> By reviewing and verifying all objectively verifiable indicators (OVI).

<sup>3</sup> The region includes the province of Midelt.

16. The field evaluation mission took place in all five project sites and included interviews with stakeholders and beneficiaries (see Appendix 3). Wherever possible, the evaluation team adopted a focus group approach, grouping beneficiaries according to the project component in which they participated or contributed. Interviews focused on concerns related to:
  - i. evaluation criteria, guided by the evaluation questions (relevance, effectiveness, efficiency, sustainability, impact and cross-cutting dimensions);
  - ii. the continuation and consolidation of the actions and results achieved for the beneficiaries within the current institutional and strategic framework;
  - iii. the dynamics and synergies with other similar initiatives in terms of approach, results and proximity.
17. In order to determine the stakeholders to be interviewed, the evaluation team based its interviews on the information found in the project document and did not meet with any stakeholders other than those mentioned in this project document (see section 2.4.1). No other stakeholders were mentioned in interviews with stakeholders or the project team. The investigations were carried out in a participatory manner (shared findings and diagnosis allow stakeholders to take ownership of the conclusions and ensure the credibility of the report), and by avoiding any personal judgements or preconceived ideas. The work was entirely independent. It was carried out on the basis of real and factual findings, the information and documentation made available and collected.

## **1.4 Limitations of the evaluation**

18. The constraints encountered during the field mission were:
  - i. The documentation was very long. Thus, its review was time consuming, while the time allocated for this literature review and the writing of the initial report was short. The consistent absence of summary statements of activities and achievements for the project as a whole, in the sites and among the institutional partners, slowed down the literature review.
  - ii. Beneficiaries and stakeholders were not always available during the field phase. Despite the fact that the religious context was taken into account,<sup>4</sup> that interviews were confirmed by the country office one week before and that interviews were reminded/confirmed a day before, some stakeholders were absent for prayer or did not show up. The evaluation depends largely on the contribution of institutional bodies, economic operators, professional associations/organisations and beneficiaries. In addition, between a tight schedule and field visits that often lasted much longer<sup>5</sup> than scheduled, the evaluation team had to cut some interviews short.
19. The limitations encountered did not have a decisive effect on the work of the evaluation team, thanks in particular to the experience of its members with regard to the sites targeted by the project, and their knowledge of the partners and the project themes.

<sup>4</sup> For the interviews scheduled on Friday, the prayer day in Morocco, the evaluation team and OED had explicitly asked the country office to confirm with stakeholders whether they would still be available before confirming the interviews.

<sup>5</sup> An evaluation interview lasts an average of one hour, with a half-hour break in case the conversation is extended. Beyond that time, it may be difficult for the evaluation team to get to the next appointment and be there on time.

## **2. Context and description of the project**

### **2.1 Context of the project**

20. Morocco has a diverse and varied landscape. As part of the Mediterranean basin, it is one of the countries whose biodiversity is a priority in terms of conservation.
21. Nevertheless, the country's valuable biodiversity, including the Atlas Mountains and its oasis systems, is threatened. Increasing economic pressure on the Atlas Mountains and the multiple resources of the Atlas oases are leading to the gradual loss of the uniqueness of the ecosystem, a depletion of the natural productivity and, in particular, a decrease in the biodiversity. 25 percent of plant species are threatened (1 700 taxa) and nearly 600 animal species have reached the threshold of non-renewal and are classified as endangered species. This loss of diversity has a negative impact on livestock farming (breeds but also the quality of their food). As livestock farming represents the highest 1 percent of agricultural income in Morocco, the loss of diversity therefore has consequences on the income and living standards of the population, as well as on the sustainability and the livelihoods of traditional communities in Morocco that depend on livestock farming. In addition, pressure on natural resources is increasing.
22. The following factors contribute to the disappearance of local plant and animal species: desertification; overgrazing through the non-renewal of soils and plant species; unsustainable use that threatens the level of plant and animal species; unregulated hunting that can have negative consequences on the level of animal populations; and above all, increased urbanisation that appropriates animal hunting territories and prevents plants from growing (concrete on the ground). 30 000 hectares of plant cover are thus lost each year in Morocco; this has significant consequences on the various species that depend on this cover for their protection, and creates a vicious circle.
23. Overall, Morocco benefits from a clearly defined and relatively comprehensive environmental policy. The latter supports biodiversity and the fight against desertification. It encompasses: the reduction of pollution and nuisances; the preservation of biodiversity and natural areas; training; environmental education in schools; and information and awareness-raising among the population on environmental and biodiversity issues. This policy is supported by a highly developed legislative framework and an increasingly convergent institutional organisation. It should be noted that an important part of the environmental action relating to biodiversity is carried out, in particular, by the Ministry of Agriculture, Maritime Fisheries, Rural Development, Water and Forests (MAPMDREF), the Ministry of Energy, Mines and Sustainable Development (where the operational focal point of the GEF resides), and the Ministry of Equipment, Transport, Logistics and Water.
24. Despite the various initiatives put in place by the government to address the growing environmental problems in the country, particularly in the oasis systems, additional efforts are needed to address the challenges and ensure integrated approaches to sustainable development and biodiversity conservation. All the engineering and technological solutions, which have long been put forward to solve problems in these areas, have turned out to be ineffective. These solutions, sometimes designed without taking into account the

socio-cultural context of the people concerned and their behaviour, have had undesirable negative effects.<sup>6</sup>

25. The survival of agro-biodiversity in oases is threatened by various factors such as: the loss of customary institutions and forms of social organisation that support the management of oasis systems; the abandonment of traditional crop and livestock systems; the conversion of land and habitat in and around traditionally managed fields to other uses, such as unsustainable intensive agriculture and plantations; and the displacement and dilution of traditional varieties grown in these systems.

## 2.2 Presentation of the project

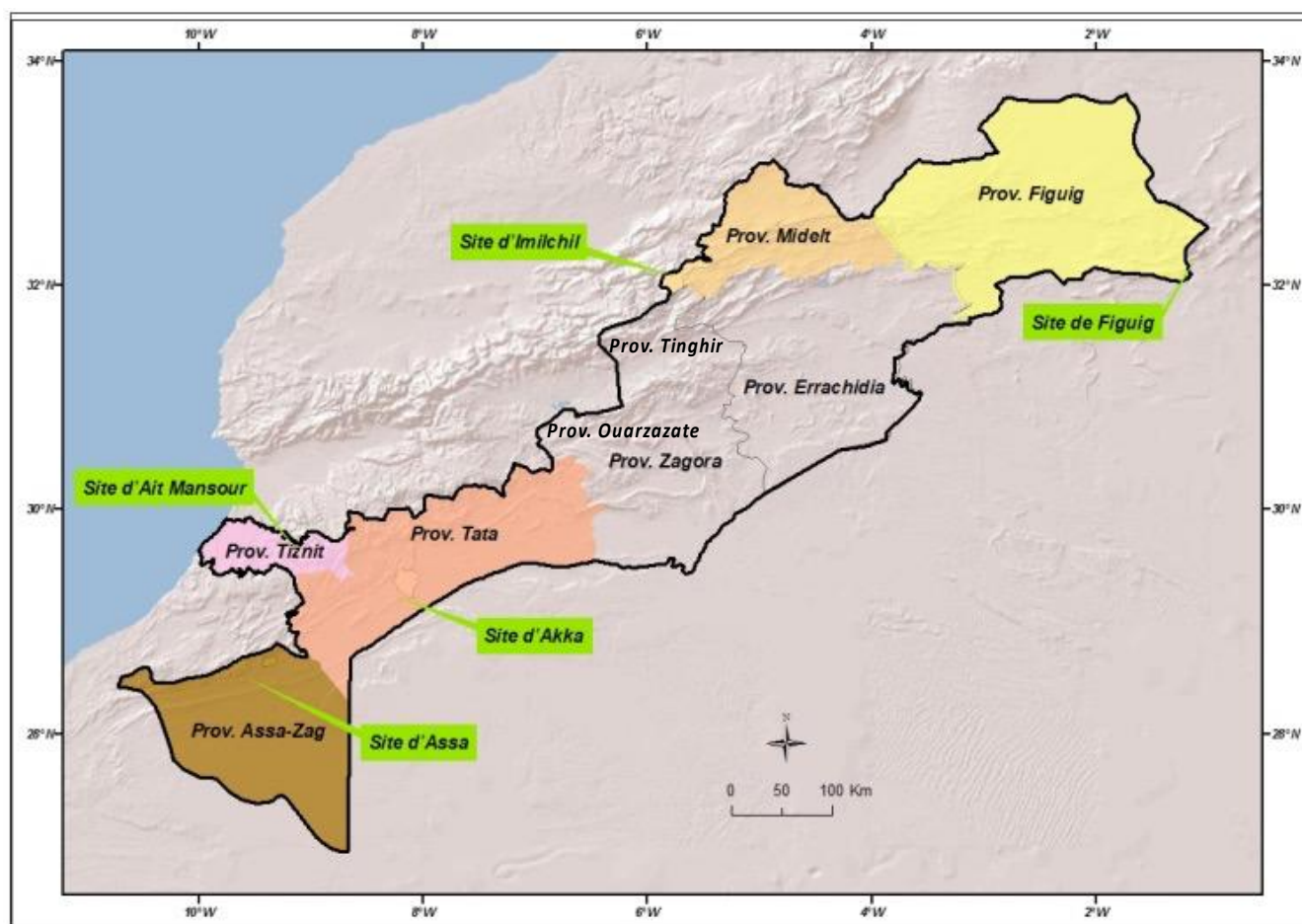
26. Key project information is found in the box below:

### Box 1: Key project information

GEF ID:	5481
Beneficiary country:	Morocco
Implementing partners:	National Institute for Agricultural Research, Ministry of Agriculture and Maritime Fisheries (MAPM)
GEF focal area:	Land degradation; Biodiversity
GEF Strategy/Operational Programme:	BD-2– Integration of biodiversity in production landscapes/sectors; LD-1– Ecosystem services in production landscapes (agriculture, pastures); LD-3 - SLM in broader landscapes (integrated management)
Date of validation by the CEO:	9 January 2014
Date of validation by the PPRC:	27 May 2015
Project initiation date:	01 April 2016
Original project end date (original NTE):	31 March 2019
Revised project end date:	31 December 2019

27. The project to support biodiversity conservation and mitigation of land degradation in partnership with GEF, supported this environmental policy by involving government officials at central and regional levels, agricultural producers, communities and local authorities in five oasis systems targeted by the project, namely: 1) Assa, 2) Akka, 3) Ait Mansour, 4) Imilchil-Amellago and 5) Figuig.

<sup>6</sup> For example, gravity-fed irrigation leading to soil salinization, the multiplication of well drilling leading to the drying up of the water table, or mechanization which is unsuitable for irrigation areas.

**Figure 1: Location of the five project sites**

Corresponds to United Nations World Map, 2020

**Table 4: Information on the five project sites**

Site	Province	Cultivated area on site (ha)	Area covered by the project (ha)	Beneficiary population
<b>Ait Mansour</b>	<b>Gulemim</b>	140	140	1 500
<b>Akka</b>	<b>Tata</b>	6 626	80	7 365
<b>Assa</b>	<b>Assa-Zag</b>	6 718	40	17 977
<b>Figuig</b>	<b>Figuig</b>	1 125	557	12 577
<b>Imilchil</b>	<b>Midelt-Errachidia</b>	6 180	300	39 000
<b>Total</b>		<b>21 116</b>	<b>1 117</b>	<b>78 419</b>

Note: The beneficiary population corresponds to the people who have benefited from a project activity (training, awareness-raising, etc.). The area covered by the project is the area where the project carried out organic production experiments.

28. The area covered by the project amounts to 1 117 ha. This is tantamount to 5.3 percent of the total cultivated area of the project area and concerns 78 419 beneficiaries. The areas concerned are representative of the oasis systems in southern and north-eastern Morocco.

They are characterised by a rich and diversified natural setting despite the dry climate, and a population bearing a rich indigenous knowledge. This population is responsible for the conservation of a unique oasis agro-ecosystem based on a three-tier system (date palm, fruit trees and annual or perennial crops). However, the agricultural products of these territories are poorly valued and the ecosystem is constantly threatened by water shortage, fragile soils, water erosion and climate change. The increasing pressure on natural resources to meet the economic needs of a growing population, should not be neglected.

## 2.3 Objectives of the project

29. In the context of the global environmental momentum and the concerted provisions requiring all stakeholders and states to comply with a certain mode of conduct, the issue of biological diversity has been at the centre of Morocco's concerns since the adoption of the Convention on Biological Diversity at the 1992 Earth Summit in Rio de Janeiro.
30. The project aims at contributing to the achievement of national objectives in terms of biodiversity protection and enhancement, in accordance with the provisions of the National Charter for Environment and Sustainable Development. To this end, it has the following objectives:
  - i. **Its global environmental objective** is to contribute to mitigating and reversing the current global trend of land degradation, through the promotion of sustainable land and water management practices and biodiversity conservation in oasis systems in Morocco.
  - ii. **The overall project objective** is to increase food production and improve the livelihoods of local populations, by supporting the improvement of soil condition and fertility and promoting sustainable agricultural practices in five oasis ecosystems: Ait Mansour, Akka, Assa, Figuig and Imilichil-Amellago.
  - iii. **The specific project objective** is to improve the conservation and sustainable management of five oasis systems, including their revival, the enhancement of their role in household food security and in the preservation of agricultural biodiversity, as well as their contribution to natural, landscape and cultural heritage, and to indigenous knowledge systems.

## 2.4 Expected outcomes

31. There are four project outcomes (as stated in the project document):

**Outcome 1 (O1):** An enabling environment has been created to support and improve agricultural biodiversity conservation, by targeting regulatory frameworks, building institutional capacity and collecting and storing data.

**Outcome 2 (O2):** Agricultural production is increased and land degradation in oasis systems is mitigated.

**Outcome 3 (O3):** Biodiversity conservation and sustainable use are integrated into alternative income-generating mechanisms, with the participation of local people living in oasis landscapes.

**Outcome 4 (O4):** The project is implemented following a results-based management.

32. For each result, the project has defined monitoring indicators and established a baseline to ensure rigorous monitoring of the target achievement (see Appendix 6).
33. To ease management for Moroccan institutions and their responsibilities, it was decided to organise the project activities into four components and to associate to each: one of the four expected outcomes, outputs, a baseline, a budget, names of the financial management institutions, and main activities to be carried out. The four components of the project are:

**Component 1 (C1):** Create an enabling environment to maintain the flow of agro-ecological system services in Oases.

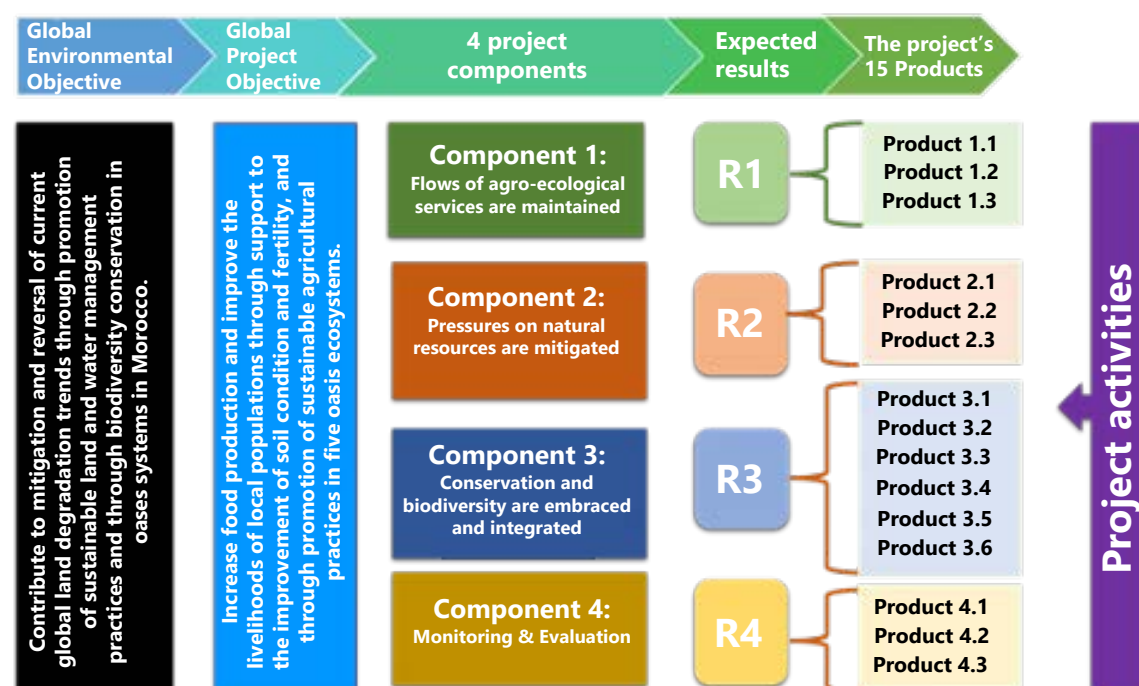
**Component 2 (C2):** Mitigate pressures on natural resources due to competing land use in order to reverse the trend of land degradation in oasis landscapes, by applying good agricultural and agro-ecological practices.

**Component 3 (C3):** Integrate biodiversity conservation and sustainable use into the local strategies for economic diversification in the oasis landscapes.

**Component 4 (C4):** Monitoring and evaluation.

34. With regard to cross-cutting issues, the project document (page 62) clearly underlined in one paragraph the importance of paying "special attention to gender aspects".

**Figure 2: Brief presentation of the logical framework of the project**



Source: Evaluation team (consultant)



## 2.4.1 Description of stakeholders

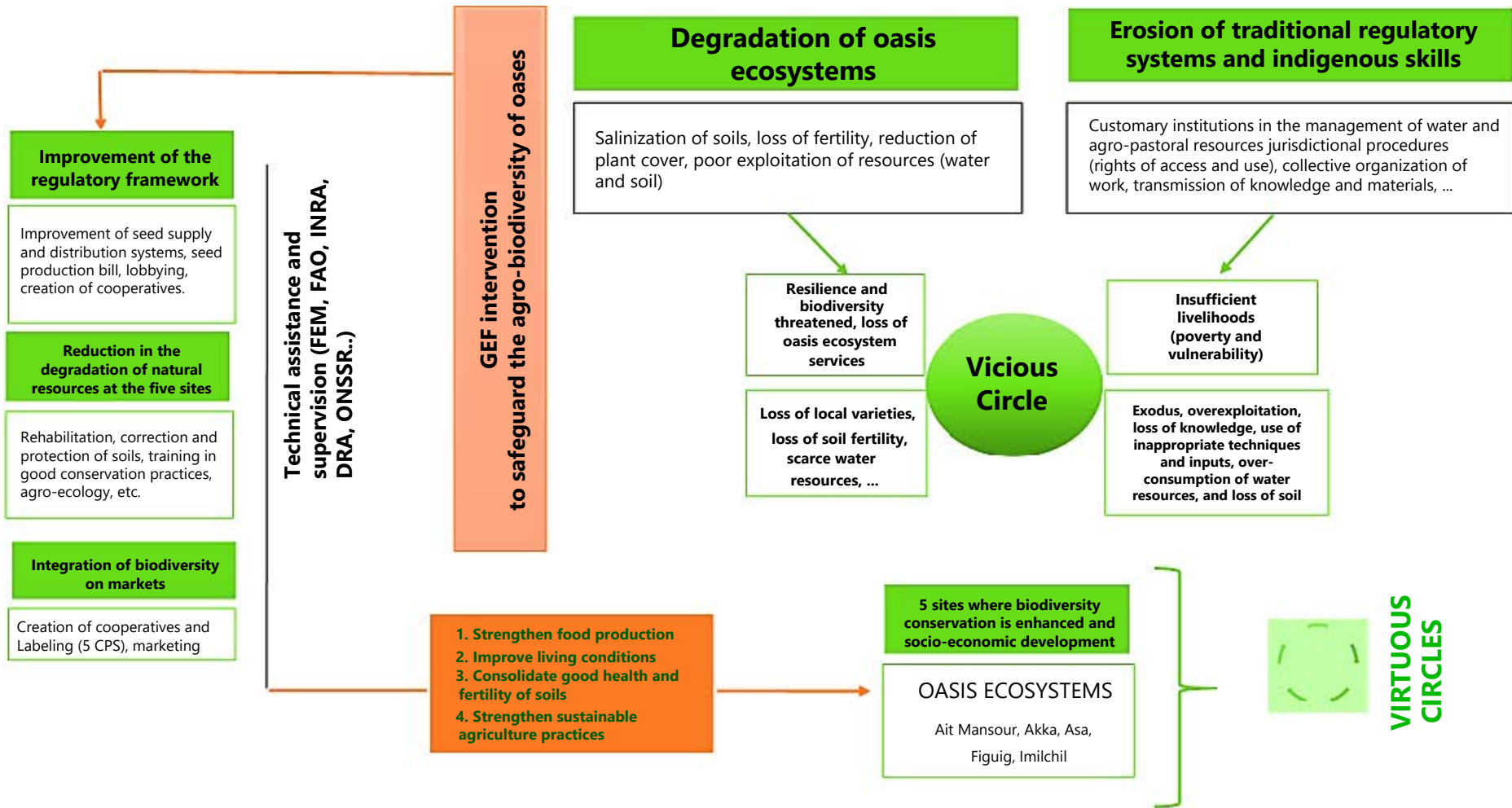
35. **The Steering Committee** is chaired by the MAPMDREF representative at the central and regional level and is composed of the following bodies:
- |  |                                     |
|--|-------------------------------------|
| i. GEF focal point                               | viii. Executive Director of ONCA    |
| ii. FAOR Morocco                                 | ix. Executive Director of APDESPS   |
| iii. MAPMDREF central directorates (DIAEA; DDFP) | x. Director of ORMVAT               |
| iv. Executive Director of ADA                    | xi. Director of Tiznit DPA          |
| v. Executive Director of ANDZOA                  | xii. Director of Guelmim- Smara DRA |
| vi. Executive Director of INRA                   | xiii. Director of Figuig DPA        |
| vii. Executive Director of ONSSA                 | xiv. Representatives of EIGs        |
36. It was found that the roles assigned to each party are indeed the same in implementation as those defined at project design (project document). It was initially planned that the Minister of Agriculture and Maritime Fisheries (MAPM) or a representative would chair the project Steering Committee and that INRA would be the executive manager, in coordination with MAPM and its agencies: ADA, ANDZOA, APDESPS and ONCA. However, in effect, INRA – which is a body under the supervision of MAPM and an initially planned member of the steering committee – coordinated the project, mainly to compensate for the absence of certain members during meetings.

## 2.5 Theory of change

37. **Definition:** The theory of change explains how the activities or interventions selected by a project achieve the desired outcomes and how the latter, in turn, lead to the expected impacts within a particular environment, in this case, oasis systems. In the context of this project on the conservation of biodiversity and oasis landscapes, the project seeks to maintain the conditions to further the regulatory environment and to enable associations and cooperatives to emerge. These latter will act as the interlocutors of the State, capable of organising producers and gaining market shares, thanks to the typicality of local products, the singularity of the resources used, the quality of the products, and the profitability of the sectors set up. Figure 4, prepared by the evaluation team, presents this momentum.
38. **Oasis environment:** The evaluation revolves around relevance, coherence, effectiveness, efficiency, sustainability, gender analysis and equity criteria; this enabled the evaluation team to verify that, according to the project document, the following aspects – which directly affect the oasis environment and underpin the project action – constitute the environment in which the project operates and which, constitute vicious circles for oases that the project seeks to break.
- i. The oasis systems are degrading and at the same time the oasis traditional regulatory systems and indigenous know-how are eroding away, despite the following efforts:

- The recognition of oases as Globally important agricultural heritage system (GIAHS) brings a strong development potential to oasis areas;
  - Public and international institutions are showing a growing willingness to earmark substantial financial and technical resources to revitalise oases.
  - Oases are recognised as ingenious systems built around ancestral knowledge and know-how that are a heritage to be safeguarded and developed, not only for their direct beneficiaries, but also for humanity.
- ii. Oases face complex development challenges (rural exodus, water scarcity, erosion of phylogenetic resources, palm tree mortality due to bayoud disease, land pressure, etc.)
39. **The project:** The project sought to stem these vicious circles by establishing virtuous circles (*impact*). To do this, the project supported oases by i) improving the regulatory framework, ii) reducing the degradation of natural resources in the five sites and iii) integrating biodiversity into markets (*outcome*). Consequently, the project strived to a) strengthen food production, b) improve the living conditions of the oasis populations, c) consolidate good soil health and fertility, and d) strengthen sustainable agricultural practices (*components*). Successful implementation of these actions at the five sites would strengthen biodiversity conservation and socio-economic development (*objective*). This will also enable the sites to better combat the degradation of oasis systems and the loss of indigenous knowledge and know-how, thus turning the vicious circle in which oases are located into virtuous circles (*impact*). A list of the activities undertaken can be found in Appendix 6. These activities focused on training, mobilisation of producers, and improvement of the regulatory and business environment.

Figure 3: Theory of change framework (results chain)



Source: evaluation team (consultant)

40. **Specific objective:** The project aims to “improve the conservation and sustainable management of five oasis systems”, by enhancing their role in food security and the preservation of agricultural biodiversity, as well as their contribution to natural, landscape and cultural heritage and indigenous knowledge systems. The challenge for the project is that the five sites are different at the human and biophysical levels. The project mobilises many stakeholders and approaches that may appear as requiring overabundant actions (see list of activities in Appendix 6).
41. **Specific change:** By adopting best farming practices, the valorisation of local cultivars, water saving and soil management techniques, and the marketing of organic products with remunerative prices, the beneficiaries’ incomes will, over time, improve and enhance traditional regulatory systems and indigenous know-how. Moreover, it will stop the degradation of oasis systems, thus creating the virtuous circles shown in Figure 4.
42. As a GEF project, the project activities are built around and have guided the interventions of other public stakeholders in the five sites. This synergy was an important issue and bore fruit through the inclusion of biodiversity conservation in the intervention policies of these stakeholders. The project played a pioneering role at this level. However, consolidating these achievements will be a challenge for the development of oases (see Appendix 7).

### 3. Evaluation questions

#### 3.1 Relevance – EQ1: How do the project objectives and activities related to biodiversity conservation and mitigation of land degradation through adaptable management of agricultural heritage systems fit into national, GEF and FAO priorities in Morocco?

**Finding 1.** The project is in line with the foundations of the current policy and strategies of the GEF, FAO and Morocco.

**Finding 2.** The Globally Important Agricultural Heritage System (GIAHS) accreditation is the starting and anchoring point of the project; without it, the approach collapses and questions the relevance of the project.

**Finding 3.** The project took advantage of a changing institutional framework (creation of ANDZOA and partnership with INRA in the framework of this project).

**Finding 4.** A rebalancing and better focusing of activities would have been more relevant and would have favourably influenced the project effectiveness and impact.

43. **Strategic relevance:** Consistency and coherence between the intent of the project, its objectives, results and activities demonstrates, as verified by the evaluation team, that the project is in line with the foundations of the current policy and strategies of the GEF, FAO and Morocco, particularly in the four areas selected by the project, namely: biodiversity conservation, adaptation to climate change, biodiversity enhancement and information management. The project was able to implement relevant activities aimed at improving, in the particular context of Moroccan oases, the sustainable management of ecosystems and their natural resources while balancing conservation, adaptation to climate change and socio-economic development.
44. Since its conception, many strategic, institutional and programmatic initiatives in the field of environment and biodiversity inspired the project, in particular:
- i. the strategy of the Global Environment Facility (GEF), which supports projects in developing countries in the areas of biodiversity, climate change, international waters, land degradation, the ozone layer and persistent organic pollutants;
  - ii. the Country Programming Framework (2013-2016) established by FAO has defined three priority areas of intervention for Morocco: two of them relate to the environment, biodiversity and improvement of the living conditions of the vulnerable population depending on the exploitation of natural resources;
  - iii. Morocco's new Constitution of 2011, which recognises environmental protection and sustainable development. In terms of rights and freedoms, Article 19 of the Constitution states that "Men and women shall enjoy equal civil, political, economic, social, cultural and environmental rights and duties...";
  - iv. The international commitments of Morocco, which has ratified the three conventions resulting from the 1992 Rio Conference process and relating to climate change, biodiversity and the fight against desertification. In this regard, it is necessary to recall the efforts made by Morocco for the drafting of two previous versions of the National

Biodiversity Strategy and Action Plan (NBSAP) in 2000 and 2004. The latest version, the 5th national report of CBD (2014) on CBD Strategic Plan 2011-2020 (CBD/NBSAP project) has been updated thanks to GEF contribution. The amount of the Action Plan 2016-2020 for agricultural biodiversity is 255 million MAD;

- v. The implementation in Morocco of a Globally important agricultural heritage system (GIAHS<sup>7</sup>) project carried out in 2010 (project GCP/GLO/295/UCP) on a pilot basis for a preliminary assessment of oasis agro-ecosystems, strongly influenced the project from its inception in 2011. It paved the way for national partners to capitalise on achievements, lessons learned, and good practices in order to broaden the adaptive approach to sustainable land and water management and the enhancement of the agricultural heritage of the oasis community in Morocco. The GIAHS status is granted by FAO but is strictly independent of the project.
45. **GIAHS accreditation, the starting point of the project:** The strategy of Project FAO/MOR 044 is to use GIAHS accreditation in Morocco as a gateway to address biodiversity. This approach gained momentum during the presentation of the "collection of 144 accessions"<sup>8</sup> action to COP24 and is considered a success. The "agdals" of Amellago, as a traditional institution, was also a kind of trademark (debate in parallel workshops according to INRA).
  46. The project helped convince the partners of the relevance of the approach; they are currently reflecting on a development approach specific to the oasis and high mountain areas of the Atlas Mountains as part of the preparation of the new agricultural development strategy. The framework of the Green Morocco Plan agricultural development strategy, which already contains two pillars not covering oases, is already considering a possible 3rd pillar. They are also thinking of creating Moroccan GIAHSs with national criteria that can be validated by the FAO, thus generalising the approach implemented by project GCP/MOR/044/GFF.
  47. Although the GIAHS was not an initial component or objective of the project, it was only during the implementation of project FAO/MOR 044 that the concept took on its full importance in the communication and argumentation necessary to gain the support of all stakeholders. It is only with the GIAHS recognition of the Imilchil-Amellago site and the outreach of its potential impacts that national institutions unanimously realised that i) the agro-cultural issues of oases are not covered by Pillar II relating to family farming in the Green Morocco Plan (GMP) and that ii) GIAHS is the appropriate framework to build on the ancestral knowledge and agricultural practices of oases. Indeed, these include the conservation of irrigation and efficient water management systems, current livestock practices and also provide an opportunity to work with communities in the participatory management of natural resources.
  48. The first GIAHS project in Morocco is innovative in its methodology. Indeed, it holistically addresses sustainable development by integrating a biodiversity axis in line with an economic and social inclusion programme, in order to: improve the income of the population; reduce the pressure on natural resources; and enhance the value of de facto organic, though non-certified, production in the Oasian and High Atlas areas.
  49. The following FAO criteria to select GIAHSs are directly in line with the project objectives:

<sup>7</sup> Also known as Globally Important Agricultural Heritage Systems.

<sup>8</sup> Name given to a seed lot to identify it when it enters a gene bank.

1. Food and nutrition security of many poor people.
  2. Biodiversity and genetic resources.
  3. Indigenous knowledge of individuals and communities.
  4. The cultural diversity of agriculture including the diversity of products and services.
  5. The diversity of landscapes and aesthetic values.
50. The relevance of the project has been enhanced by this project/GIAHS synergy within FAO. The project has recognised the benefits of the GIAHS certification; it is built around it and has promoted an approach that is being adopted by all project partners in the development of new strategies.
51. **A changing institutional framework:** The project design in 2013 was relevant because it was carried out just after the creation of the National Agency for the Development of the Oasian Areas and the Argan (ANDZOA) dedicated to the safeguard and development of oasian areas and the Argan, through the implementation of ten strategic files addressing, among others: the conservation of "Preserved Territory" biodiversity, the enhancement of "Attractive Territory" agricultural and forest resources and the "Attractive Territory" socio-economic and social inclusion.
52. INRA, which has already worked with FAO for the identification and aggregation of GIAHS sites in Morocco, was in charge of the general coordination of the FAO/MOR 044 project. After the start of the project, INRA adopted the "Medium Term Research Programme – MTRP 2017-2020" strategy which integrates aspects addressed under the FAO/MOR 044 project. This strategy is based on 3 axes:
- Axis 1:** Exploration, collection, introduction and conservation of genetic resources.
- Axis 2:** Characterisation and evaluation of genetic resources.
- Axis 3:** Multiplication and regeneration of saved collections.
53. This new strategy, coupled with INRA's knowledge and capacities, helped guide and manage the project in a relevant manner, as it is in perfect synergy with the project. Alongside the Ministry of Agriculture, Fisheries, Rural Development, Water and Forests (MAPMDREF) via the Green Morocco Plan, High Commission for Water, Forests, and the Fight against Desertification (HCEFLCD) and INDH intervened in support of environmental conservation as well as economic and social inclusion in the sites covered by the project without, however, being directly involved in the project. Nevertheless, their presence has contributed to increase the project's influence through GIAHS certification outreach and can play a role in ensuring the project sustainability, and therefore, that of oases. Thus, other institutions of the Ministry of Agriculture, depending on their responsibilities, can be directly involved either to complete the work done or to implement future projects, especially downstream from the value chains (ADA and DDFA).
54. The relevance of the project is very visible in the actions carried out by Morocco, for more than eight years. In the agricultural sector, they promoted militant initiatives (organic agriculture in the North, fair trade in the South) for environmental and social "good practices" in terms of management of crop inputs, value sharing for the benefit of farmer-producers (reduction of intermediaries or guaranteed prices) and autonomy of the latter. Thus, Morocco has set up dedicated structures to steer development plans for local

products, to adopt the necessary legislation for labelling / certification and organisational approval and decision circuits.

55. **Ambitious project, sometimes at the expense of relevance:** The project was ambitious in its objectives and chose sites and beneficiaries covering a very large area when the GEF budget allocated was limited (about MAD 0.8 million). This made things more difficult for project stakeholders. In addition, the activities exceed the duration of the project (e.g. the labelling and organic certification of oasis products) and this has consequences on impacts, their sustainability and the distribution of the final responsibility for these impacts. The relevance of the project has been ascertained, given its importance in the general policy of the government, especially through ANDZOA policy. However, due to the lack of a clear delineation of responsibilities between institutions and the project in terms of objectives, the latter goes beyond the framework of an international aid project. As a result, the objectives somewhat question the relevance of the project insofar as they no longer fall strictly within the framework of this project.
56. Its aim to act exhaustively on multiple objectives, results and stakeholders in areas as varied as biodiversity and pure research or the implementation and development of activities, worked against the relevance of the project. A rebalancing and better focusing of activities would have favourably influenced its effectiveness and impacts. For example, the capacity of human resources to ensure factual monitoring of the situation on the field is weak. This is the case faced by the Tamount women's semolina production cooperative, whose situation described in Box 2 was only reported to FAO-Morocco when the evaluation mission returned to Rabat in early September, whereas their premises had been seized six months earlier.<sup>9</sup>

### Box 2: Testimony of a cooperative in Imilchil (failure)

The Tamount Women's Semolina Production Cooperative received support from the FAO/MOR 044 project, which made a significant effort to equip a room with the equipment necessary for bread-making (bakery and pastry shop). Being the only bakery in Imilchil, bread production increased from 100 to 1 000 loaves per day, enabling the 13 women to achieve an average monthly income of about MAD 800 per month. This positive development made some people jealous and an interference with other stakes in the region; this is why the Cooperative lost its premises in June 2019. It was expelled by the local authority owning the premises, which preferred to rent it to another association. The Cooperative's equipment is scattered among the members while waiting to find a suitable premise.

57. Stakeholders at the regional level are unanimous on the fact that the project, in its design and in its implementation, has not taken into account the needs of young people and their integration into the process of biodiversity conservation and climate mitigation. However, it should be noted that the project asked the local supervisory bodies (Regional Office for Agricultural Development of Tafilalet and the DPAs concerned) to take this aspect into consideration while selecting participants in project activities. The lack of information in the project documents on this issue impedes the evaluation team from making an assessment.

<sup>9</sup> This relies on the statement of beneficiaries in the field who claim that it was following several field visits by the former FAO country representative that the cooperative was provided with the necessary equipment. Neither Mr. Saidi Essadik – project consultant and FAOMA's appointed coach to accompany the evaluation team – nor the executive from the Regional Office for Agricultural Development of Tafilalet (ORMVATAF) present during the interview with the cooperative, were aware of this. It is obvious that ORMVATAF does not visit the field regularly.



Moreover, young people are leaving oases, this is a problem in terms of ensuring continuity and carrying on the ancestral work. This phenomenon is not particularly recent, but has accelerated since the 1980s, according to the people met and confirmed by national statistics (broader data than just oases). Several oases show negative growth rates and the lack of labour is worsening.

58. The project has not made any provision for livestock activities, whereas they are inseparable from crops on family farms; pastoralism is an integral part and sometimes the main activity (case of Assa) of oasis production systems. Consequently, the project could have adopted a more inclusive approach to the targeted territories. But it focused on certain sites using a "field" approach and not an agrarian or agrosystem approach, which would have had a positive impact on its relevance.
59. **Assessment of relevance: Highly Satisfactory (HS):** Despite the weaknesses described above, the evaluation team finds that relevance is proven in relation to Morocco's strategies and with FAO and GEF. The project and its relevance could have been strengthened by a more balanced intervention logic in terms of its objectives and the duration of its implementation; yet, the contribution to the current political discourse on oases and the pioneering role in the use of GIAHS certification rate the project Highly Satisfactory. For the full list of ratings, see Appendix 1.

### **3.2 Effectiveness – EQ2: To what extent have the set objectives and outcomes and the planned activities been achieved and carried out?**

**Finding 5. Aware that the time allowed to evaluate any outcome is short, the evaluation team nevertheless notes that the improvement of the regulatory framework (Outcome 1) has not yet been fully achieved and that the achievement of this outcome depends on actions still to come.**

**Finding 6. Project outputs under Component 2 are likely to improve land use conditions in oases; they promote and will continue to promote the sustainable use of natural resources (Outcome 2) after the project's completion.**

**Finding 7. Certain studies carried out under the project are important reference frameworks which must be capitalized and exploited by the various partner structures. However, the added value of each of the studies and consultations undertaken – in view of their high number, in a known field such as oases – suggests that resources used for the creation of knowledge may have been more effectively spent on the achievement of project outcomes.**

**Finding 8. One innovation of the project is to have tried to integrate biodiversity into markets (Outcome 3), particularly through organic labelled agriculture. The project has linked biodiversity conservation with the improvement of farming conditions of soil, water and genetic material resources, in order to improve the economic and social situation of the beneficiaries. However, several activities, still uncompleted, deserve special attention, as they compromise the expected outcomes.**

**Finding 9. Addressing the issue of marketing and profitability of organic production at economic, environmental and social levels falls under Component 3: Integrate biodiversity conservation and sustainable use into the local strategies for economic diversification in the**

**oasis landscapes. The evaluation team regrets that this important phase was not fully carried out and that it must be outside project supervision.**

**Finding 10. The evaluation team noted neither any impact of the project on existing networks, nor any market prospecting by the project with a clearly defined strategy, such as a possible agreement with prospects or Terms of service for organic labelled products specifications (size, quantity, etc.).<sup>10</sup>**

**Finding 11. The desire to achieve deliverables, such as the PPRs and PIRs, took precedence over the monitoring of outcomes and the summary reporting necessary to act for change (see Output 4.1).**

60. The project has tried to focus its activities on good ancestral agricultural practices in oases including the conservation of irrigation and efficient water systems management, livestock practices, and the strengthening of ancestral community practices for participatory natural resource management.
61. The multiple activities programmed under Project MOR 044 have been undertaken at varying levels. However, the targeted results have revealed certain disparities from one area to another and some "uncompleted" activities that may adversely affect the expected impacts of the project.

**Component 1 (C1): Create an enabling environment to maintain the flow of agro-ecological system services in Oases.**

62. **Overall assessment of the component/Outcome 1:** Moderately Satisfactory Finding 5 with regard to project Component 1 indicates that the expected outcome has not been fully achieved. The catalogue of databases (Output 1.1), the implementation of a regulatory framework (Output 1.2), as well as training and networking sessions (Output 1.3), did not confirm "biodiversity conservation" through the enhancement of local knowledge, the know-how of populations, and biodiversity as a regulated strategy framed by an inter-professional network to help small farmers in Oases gain capacity to adapt to climate change and resilience. This is the beginning of a process whose final outcome depends on actions to come.
63. This component is structured around the following three Outputs:

**Output 1.1: Development of databases and catalogues on local seed varieties, including plant genetic resources and pollinators.**

64. Databases: The project has made it possible to inventory 144 genetic accessions that have fed INRA national gene bank in Settat and which constitute research material for the years to come. About 50 local seed varieties were sown in INRA's Sidi El Aidi station to describe

<sup>10</sup> However, the project team points out that the project participated in the Meknes International Agricultural Fair with products from the sites and that contacts were established between buyers. It was also reported that an agreement was signed with Cebio (Club of organic entrepreneurs) for the marketing of the site's products. Contacts were reported to have been made with AMABIO and FIMABIO (Interprofessional Federation of the organic sector). However, the evaluation team did not find any evidence in the project documentation to support these statements. Moreover, during interviews with the beneficiaries and the labelling coordinator, no clearly defined strategy, such as a possible agreement with prospects or Terms of service for organic labelled products specifications (size, quantity, etc.) emanating from the project was mentioned.

and characterise them. These accessions are a crucial support for biodiversity research at INRA under the Medium-Term Research Programme currently being prepared (2021-2024). To carry out this work, the project carried out large-scale surveys (189 survey forms of 45 pages each and the mobilisation of 11 investigators) which were analysed and synthesised in a database implemented at INRA. The evaluation found that its use is not yet widespread and, excluding Tiznit DPA, the partners who contributed to it do not have access to it, often out of ignorance, sometimes out of indifference. However, this database exists and is effective insofar as it is unique and contributes to the national gene bank.

65. Mapping (GIS): The second work carried out is the mapping of seed producers, which resulted in a list of seed producers in the sites. The GIS of the project – which the evaluation found to be only a draft document on the future GIS and not an operational one – focuses on the physical, human and socio-economic aspects of oases. It includes the following data: the plot plan with the identification of each farmer and the geolocation of the plots. The evaluation team acknowledges that the project team was very present during the consultation and during the field missions carried out with the various consultants (agro-biodiversity consultant and organic agriculture consultant). However, the evaluation team noted that a previous mapping work (GIS) enabling close monitoring of producers had already been done by the CPGG firm (in charge of training and organic crop certification). This served as a steering tool for its actions at the level of the five sites as it inventoried intercropping in the oases per farmer. This tool, developed by the service provider in charge of training in organic farming under Project MOR 044, is operational and used. The evaluation team found that this product (non-contractual; a CPGG initiative to track packages), is not known to the project and is therefore not identified as a useful mapping tool. This tool, which the evaluation team found to be practical and useful, could have been supplemented by the project, making it more efficient and operational, and a missed opportunity for the project.

**Output 1.2: A regulatory framework for the development of local seed varieties has been set up and the seed sector is strengthened.**

66. In order to promote the GIAHS certification of certain sites and encourage the labelling of organic production in these areas, a study was carried out on the theme "Development of a regulatory framework for local variety seeds". The study showed that the legal arsenal covering certified seeds in Morocco does not take into account local variety seeds. A draft regulatory text, in the form of a technical regulation addressing the production, packaging and distribution of local variety seeds in oasis and mountain areas, has been prepared and submitted to the authorities for approval. The Government of Morocco has not yet approved this text, although the relevance of the draft text is not questioned by the authorities. This in no way hinders the strengthening of the sector through seed production, breeding and organic production. However, in terms of efficiency, the output is not achieved and depends on government action, which is still to come.

**Output 1.3: Seed producers' cooperatives and networks of seed producers have been established.**

67. The project provided for the creation of a network of seed producers "to promote and organise the preservation and distribution of open-pollinated seeds". To this end, the project identified 52 producers including 15 multipliers and 1 distributor in Akka; 7 multipliers and 1 distributor in Assa; 10 multipliers and 2 distributors in Figuig; 7 multipliers and 1 distributor in Ait Mansour; 13 multipliers and 3 distributors in Imilchil-Amellago.

These producers received specific training supported by the implementation of an information campaign on project activities, on the importance of biodiversity conservation, and on the importance of different stakeholder involvement. However, the envisaged networks have not been created – in the sense of groups clearly identified by shared choices, discussed strategies, platforms for exchanges and information exchanges, and finally as an emerging local professional group. The output has therefore only been partially achieved.

**Component 2 (C2): Mitigate pressures on natural resources due to competing land use in order to reverse the trend of land degradation in oasis landscapes, by applying good agricultural and agro-ecological practices.**

68. **Overall assessment of the component/Outcome 2:** Satisfactory The outputs of Component 2 were carried out to improve and rehabilitate cropping systems by applying: good practices in sustainable land and water management targeting the reversal of land degradation trends (Output 2.1); flood control and measures taken against land degradation/desertification (Output 2.2); and efficient water use and hydro-agricultural development measures based on traditional irrigation systems (Output 2.3). All project outputs are likely to improve land use conditions in oases; they promote and will continue to promote the sustainable use of natural resources after the project's completion. At the level of component 2 the outputs achieved are:

**Output 2.1: Sustainable land and water management practices targeting the reversal of land degradation trends, implemented in five selected pilot sites in the oasis system.**

69. **Training:** The project has trained 384 farmers (with 23% women on average but a low female participation rate in Assa) and 21 managers and technicians representing local stakeholders in the five project sites. The general training provided aims to strengthen the knowledge and skills of the beneficiaries in order to improve their ancestral method of revitalising oasis systems, restoring both soil fertility and water retention capacity, thus enhancing the production of various agro-biological products. The trainings provided covered the following themes:
- |   |  |
|---|--|
| i. water saving and hydro-agricultural adaptations;             | vii. seed production and conservation techniques and participatory breeding to improve local varieties and preserve a broad genetic base for in situ conservation; |
| ii. rehabilitation and maintenance of seguias;                  | viii. sustainable and integrated management of crop systems;   |
| iii. rehabilitation and maintenance of khattaras;               | ix. rotations with leguminous crops;   |
| iv. crop drip irrigation techniques;                            | x. organic agriculture and certification in the five project sites;  |
| v. operation and maintenance of a localised irrigation network; | xi. creation of cooperatives and economic interest groups (EIGs) in the project sites.   |
| vi. flood control through the use of gabion baskets;            |  |

70. **Challenges:** Although these practices are being implemented, the oases visited are increasingly suffering from a lack of labour – both family and paid – due to low incomes and wages, on the one hand, and the comparative advantages of working as paid workers outside the family farm, on the other. As a result, some of the individuals trained by the project leave the oasis, thus mitigating the expected effects of these trainings. It is also worth noting, although this goes beyond the strict framework of the project, the rural exodus of young people in search of opportunities outside the oases. The immediate consequence of this lack of workforce is the invasion of oases by tussocks, the non-exploitation of irrigation water despite the existence of concrete seguias (this is the case of Ait Mansour), and the subsistence of land tenure problems, particularly land fragmentation through inheritance. This situation affects the project in the sense that a degradation of the oasis environment makes the content of the training provided less adapted to the environment and the beneficiaries of the training are likely to leave the oasis, taking with them the knowledge acquired. Presently, the maintenance of oases is labour-intensive and the workforce is reducing significantly. In other words, best practices, even if perfectly and systematically implemented (see recommendation 2 of the report to improve the quality and usefulness of the training provided), cannot stop the degradation of oases due to the exodus of the population, especially young people.

**Output 2.2: Farmers are trained in flood control techniques and measures against land degradation/desertification in the five pilot sites.**

71. **Capacity Building:** In Imilchil, the fight against floods is a never-ending struggle; floods very often cause the loss of fertile land. The project had planned to carry out actions to rehabilitate ravines and bank plantations on 50 ha in Imilchil-Amellago, to renovate damaged gabions, and to build concrete and hard stone dikes. The evaluation mission did indeed receive an inventory (a list) of the works carried out on this site, however it was unable to verify these actions in the field (see section 1.4 of the report). These are mainly:
- i. installation and maintenance of drip irrigation systems in three palm orchards in Ait Mansour, Assa and Figuig;
  - ii. rehabilitation and construction of gabion protection baskets and flood mitigation based on in-depth hydrological studies in Akka, Figuig and Imilchil-Amellago;
  - iii. planting of poplars for bank control, rehabilitation of water diversion structures and treatment of ravines through reforestation in Imilchil - Amellago.
72. The evaluation mission was able to verify with the beneficiaries and on the project sites FAOMA and INRA activities related to farmers' capacity building (trainings; see Appendix 6) and to flood control and desertification control (training in flood control and salinity control techniques; see Appendix 6).
73. Furthermore, it should be pointed out that due to the delays experienced by the project and the resulting delays in the programming of activities, the trainings planned under Output 2.2 (see Appendix 6) were carried out outside the production cycle. Consequently, some activities were not carried out at the date of the evaluation. These are:
- i. direct seeding (zero-tillage) of small cereals using animal traction in two demonstration plots (0.25 ha each), one in Imilchil and the other in Amellago.

- ii. training of agents on the "Palmivelle system" for sandy area revegetation in Akka and Figuig and coaching on preventive measures against salinity formation.
74. **Knowledge management:** With regard to studies and consultations, it is clear that the project made intensive use of external expertise. The mission identified about 20 consultations/studies carried out by the project (see Appendix 5) involving individual consultants or firms, sometimes for several studies/surveys. This was decided during the SC II meeting in 2017 to converge towards studies or "technical assistance" at a time when the real need was to decline concrete actions (support to cooperatives, animation of workshops around the commodity chains, organisation of commodity chain stakeholders, entryism with donors, mobilisation of politicians or local elected officials, etc.) and to implement technical and social engineering processes "with" and "for" the beneficiaries.
75. The evaluation team commends the emergence of national experts favoured by this approach. It should be stressed that certain studies carried out under the project are important reference frameworks which must be capitalised and exploited by the various partner structures and ongoing projects such as: Oasil or the Agritourism development project for the valley of Ait Mansour being elaborated by Tiznit DPA. Moreover, these studies which are carried out with the participation of the partners concerned, benefit from and initiate a strong ownership of the studies, and thus of the project. However, the added value of each of the studies and consultations undertaken – in view of their high number, in a known field such as oases – suggests that this management and creation of knowledge was done at the expense of achievements in the field, particularly in view of the short time allotted for the implementation of the project and the achievement of the expected outcomes. It would have been better to involve the internal resources of other national institutions to encourage them to take greater ownership of the programme, not through studies and other consultations, but rather through structural achievements that could strengthen the dynamics of biodiversity conservation (integrated water management, water valuation through the improvement of oasis productivity and the profitable positioning of products on the market, to name but three).

**Output 2.3: Local producers are trained on efficient water conservation and use practices as well as hydro-agricultural development measures based on traditional irrigation systems.**

76. The training provided was able to address the issues of collection, storage and management of irrigation water in an environment characterised by chronic water stress. The project identified priority activities for hydro-agricultural development, khetaras, flood control works, irrigation water saving systems, gabion basket constructions for the correction of ravines and for the protection of wadi banks through field surveys, undertaken by specialised external expertise; it then supported their implementation. The project also supported decentralised services in prioritising activities because they are the ones ensuring, with their mastery of hydraulic works, the implementation of actions with the required quality in this field. These achievements have been carried out with the participation of the beneficiaries and constitute a lasting achievement of the project.

**Component 3 (C3): Integrate biodiversity conservation and sustainable use into the local strategies for economic diversification in the oasis landscapes.**

77. **Overall assessment of Component 3:** Moderately Unsatisfactory Component 3 of the project has the highest number of outputs, six in total, and their achievement suffered from the late start of the project. At the project level, out of the 60 programmed activities 21 did

not succeed, 25 activities – 10 of which are uncompleted – belong to this component. This explains why the rating for this component is just Moderately Unsatisfactory, while the completion of other activities is deemed satisfactory. It is worth noting that one of the innovations of Project MOR 044 is to have tried to integrate the notion and practice of biodiversity in oases. Thanks to this innovation, biodiversity would have been given a greater attention in the markets, notably through organic labelled agriculture. Activities have been implemented, but the outcome has not yet been achieved as there is no evidence of economic diversification in oasis landscapes. The project has linked biodiversity conservation with the improvement of farming conditions of soil, water and genetic material resources, in order to improve the economic and social situation of the beneficiaries. A number of yet uncompleted activities deserve particular attention, at the risk of jeopardising the expected outcomes of Component 3.

**Output 3.1: Local capacity has been strengthened for the implementation of local products from existing labelled Oases in the five pilot sites. Labelling criteria are to be included in sustainable production standards for biodiversity conservation.**

78. **Selection of beneficiaries:** The project chose not to create, as planned, new cooperatives or EIGs and to build on those already in operation. The technical departments of DPAs, ORMVA TAF and DRAs supported the identification of cooperatives and EIGs benefiting from the project; and this approach was supported by some beneficiaries. The selection of beneficiaries was outsourced to these departments because of their knowledge of the local context, particularly in view of the complexity and proliferation of the fabric of farmers' organisations and/or associations: Assa and Akka have more than 1,400 cooperatives, boosted by the actions of APDESPS (South Agency), INDH, PMV or the various multilateral or bilateral cooperation projects. However, the evaluation mission noted that some leading farmers' organisations selected have become recurring contacts for donors as their leaders have significantly increase their social capital and have positioned themselves as key contacts for the authorities, technical departments and, inevitably, for any new project. However, some weaknesses of these EIGs – identified during training sessions on themes, such as "Existing cooperatives and EIGs [...] are experiencing management, financing and market problems. The participants [in the mentioned trainings] are not in favour of the creation of new cooperatives, but most farmers want to strengthen the existing structures to make them functional and productive" – have not improved significantly. Also, at the time of the evaluation, one of the four planned activities could not be triangulated (Creation of four cooperatives and three economic interest groups (EIGs); see Appendix 6).
79. **Capacity Building:** The selected farmers' organisations suffer from a lack of working capital to be financially independent and develop their activities, knowing that biodiversity conservation requires specific skills to innovate. Using existing structures and people with well-established work habits, whose willingness and/or ability to change their ways of doing things is inefficient; it can be counterproductive in relation to the stakes supported by the project. At the same time, capitalising on cooperatives which rely on the enthusiasm and capacities of a single individual (lack of autonomy in terms of human resources), weakens the structure and constitutes a major risk for the sustainability of its activities. When the evaluation team confirmed that training of local stakeholders in the implementation of traceability systems for labelled products and the management of supply chain documentation as well as in the use of the label, packaging and marketing strategies had indeed taken place, it met these two cases, which illustrate a lack of

autonomy of its farmers' organisations. The evaluation team cannot comment on the quality of the training provided.

**Outputs 3.2 and 3.3: Applications are submitted to the competent authorities for: the labelling of oasis local products; distinctive signs of origin and quality for food and agricultural products (cereals, apples in Imilchil, Assiane dates in Figuig and wool in Imilchil and Figuig). Besides, agricultural products from local crop varieties are labelled organic.**

80. **Labelling, process:** Regarding geographical identification, Morocco has Law No. 25-06 of 23 May 2008 on the distinctive signs of origin and quality for foodstuffs, agricultural and fisheries products. This law sets the conditions under which distinctive signs of origin and quality are recognised, attributed, used and protected, and also determines the obligations and responsibilities incumbent on those who intend to benefit from them. We also note the creation of associations around geographical identification (this is the case of the association for the geographical identification of Argan oil created in 2009). Since the entry into force of this law, Morocco's Ministry of Agriculture and Maritime Fisheries has recognised 4 distinctive signs of origin and quality.

**Figure 4: Distinctive signs of origin and quality in Morocco**

Moroccan logos for Protected Geographical Indications (PGI)	Moroccan logos for Protected Designations of Origin (PDO)
	

Source: Ministry of Agriculture and Maritime Fisheries (Directorate of Development of Production Sectors (Labelling Division)

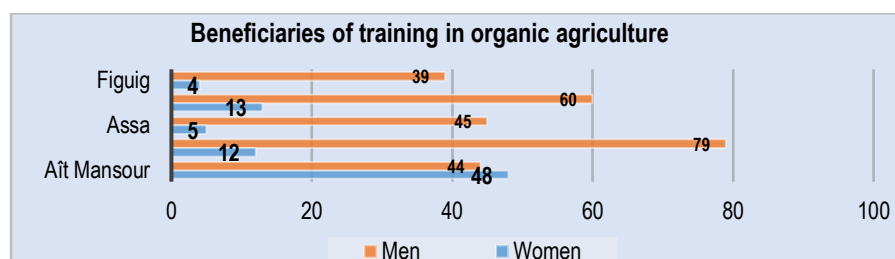
81. **Capacity Building:** The project supported producers to label and certify three agricultural products chosen for their typicality and specificity. This is the Protected Geographical Indication (PGI) label for local crops in Imilchil; "Assiane" dates from Figuig and apples from Imilchil. Due to a lack of expertise in wool breeding and production, the two wool labels in Imilchil and Figuig were not obtained.
82. The organic certification of 390 ha out of the 640 ha planned was achieved in Imilchil and Ait Mansour mainly thanks to the GIAHS label. The farmers of the five sites received, as



planned by the project (see Appendix 6), a complete training in the management of organic crops/plantings. This training focused on:

- i. The implementation of traceability systems for labelled organic products, the management of value chain documentation, the use of the label, packaging, and marketing strategies. The total number of beneficiaries of this training were 349 people, of which 23% were women.
  - ii. The appointment of 16 internal controllers attached to cooperatives or EIGs, including 5 in Akka, 3 in Assa; 2 in Figuig (date EIG); 3 in Ait Mansour; and 3 in Imilchil-Amellago.
83. However, according to the CCPG, at the time of the evaluation, only two sites (Ait Mansour and Assa) had received organic certification, although all five sites were actually organic. This is partly due to administrative bottlenecks. Actually, in January 2020, after project closure, half of the cooperatives met were not yet certified although they were in a favourable position, subject to a certificate of non-phytosanitary treatment of the area.

**Figure 5: Beneficiaries of training in organic agriculture (graph)**



Source: Evaluation team (consultant) – based on attendance records

84. The evaluation team concludes that capacity building did take place, in line with the expected outcomes of the project. It notes that some training was provided by a consultant, a specialist in organic agriculture hired by the project for this purpose. This includes: training cooperatives on the implementation of labelling specification contracts, specifications for geographical identifications, and labelled products; as well as training 100 date producers and 50 local growers in the management of labelling specification contracts as foreseen in the project document.

#### **Output 3.4: The promotion of agro-food products, such as dates, is strengthened.**

85. The project has planned to achieve the following target values:
- i. 100 percent of the agricultural product of Imilchil women's cooperative is processed and promoted;
  - ii. 50 percent of the agricultural production of date producers is promoted and processed (i.e. production of date paste and syrup).
86. This outcome was not achieved and the two programmed activities were not carried out due to the following reasons:
- i. on the one hand, the GIAHS label is only acquired at Imilchil and Ait Mansour; this offers certain opportunities to the producers of these sites but only these sites. The other sites are in the process of certification;

- ii. on the other hand, at the individual level, there are delays in the approval of organic certificates, certificates of non-treatment and conformity authorisations delivered by ONSSA to the valorisation units.
87. The late start of the project did not allow all activities to be carried out, especially the establishment of markets for organic products, as these are awaiting certification. Addressing the issue of marketing and profitability of organic production at the economic, environmental and social levels falls under Component 3: Integrate biodiversity conservation and sustainable use into the local strategies for economic diversification in the oasis landscapes. The evaluation team regrets that this important phase was not carried out and that now it has to be done without the supervision of the project due to short deadlines.

**Output 3.5: Produce a benchmarking of labelled agro-biodiversity products.**

88. The mission noted neither any impact of the project on existing networks, nor any market prospecting by the project with a clearly defined strategy: agreement with prospects or Terms of service for products specifications (size, quantity, etc.).<sup>11</sup>

**Box 3: Testimony of the President of a cooperative in Assa (success)**

The President of the Ayda Agricole Cooperative grows organic crops but is not certified. He has a network of acquaintances and family members who buy all his products, which are transported by the daily bus linking Assa to Casablanca. The President assures that he has the possibility and the capacity to market the products of the 23 members of his cooperative, who are engaged in an organic production certified according to the regulations.

89. Many small farmers in the five project sites actually produce organic but not certified agriculture and are able to sell their products at remunerative prices via local traders, family relations and other social networks (e.g. natives of the sites located in the big cities). The only data collected/available concerning a possible market for the products of the five sites consists of a few consumer requests, collected during the International Agricultural Show in Morocco (SIAM) in Meknes 2019 and established by the CPGG (the company that provided the training on organic products and ensures external control and certification according to national and international standards) on a voluntary basis (this is not an initiative of the project, but of the provider). The same service provider proposed to FAO to sign an agreement with an exporters' club during the last BioExpo exhibition.

**Output 3.6: Local producers are trained on seed conservation techniques and participatory plant breeding through demonstration plots.**

90. When the project was designed, it was obvious that farmers in the five sites had greater ownership of the seed breeding process, and more importantly, they were assured that the

<sup>11</sup> The project team points out that the project participated in the Meknes International Agricultural Fair with products from the sites and that contacts were established between buyers. It was also reported that an agreement was signed with Cebio (Club of organic entrepreneurs) for the marketing of the site's products. Contacts were reported to have been made with AMABIO and FIMABIO (Interprofessional Federation of the organic sector). However, the evaluation team did not find any evidence in the project documentation to support these statements. Moreover, during interviews with the beneficiaries and the labelling coordinator, no clearly defined strategy, such as a possible agreement with prospects or Terms of service for organic labelled products specifications (size, quantity, etc.) emanating from the project was mentioned.

varieties used were adapted to their needs and those of their communities. The project intervened to adopt a PPB (Participatory Plant Breeding) with farmers being involved in decision-making at different stages of the breeding process. Their involvement in defining the objectives and priorities for breeding, provision of germplasm, trials in their own fields, participation in research design and administrative processes, and marketing of selected lines, is central to the project's approach.

91. The evaluation team noted that farmers did participate in the identification of seed producers and the collection of local varieties, but were not given the opportunity to complete the process originally foreseen in the project document. The breeding is carried out in the INRA experimental stations (Station of the Settât region) as planned by the project and at the same time, the farmers are maintaining their traditional breeding methods.

#### **Component 4 (C4): Monitoring and evaluation.**

##### **Overall assessment of the component / Factors related to performance (4 ratings):<sup>12</sup>**

1. Overall quality of partners' involvement: Moderately Satisfactory. The project has weaknesses in communication, both external and internal, and the institutions concerned have had little or no information about the project and wish to be informed.
2. Overall quality of monitoring-evaluation: Moderately Unsatisfactory. There is a lack of synthesis and the monitoring of the project is largely based on the memory of the individuals who worked on it rather than on the monitoring-evaluation system (see Output 4.1).
3. Monitoring-evaluation, design at the beginning of the project: Satisfactory. However, the evaluation team regrets that there was no mid-term evaluation.
4. Monitoring-evaluation, implementation: Moderately Unsatisfactory. Despite a continuous exchange of information between the project coordination, the national focal point at INRA and the partners of the five sites, communication on the project leaves, as earlier said, some institutional partners in the dark.

##### **Output 4.1: The systematic field data collection system to monitor project performance indicators is operational.**

92. The analysis of the project progress reports (PPRs) and project implementation reports (PIRs) shows that the programming of annual activities was carried out in a sustained and concerted manner between FAO Headquarters and the LTO. The exchanges between the two levels reflect a permanent concern to guide the project in a start-up and institutional coordination – signalled by all interlocutors as the main challenge of the project – and a willingness to find solutions as the actions progress. However, the evaluation team notes that this did not always lead to such a thorough follow-up between the field activities and the project team (see for example Box 1).
93. Besides, a monitoring-evaluation system was installed by the project at the level of INRA and FAOMA, and the latter, built for that purpose, simply fed the PPRs and PIRs. A certain

<sup>12</sup> The rating table required by GEF (Appendix 1) considers monitoring-evaluation separately from effectiveness, so these ratings are not reported under the Effectiveness section, but under the Performance factors section.

number of remarks must therefore be made about the general quality of the monitoring-evaluation:

- i. the monitoring-evaluation system lacks a synthesis. Summary reports of all the activities/outputs of the entire project at the central level, in the DPAs and the ORMVA TAF and especially as per project site and per output, are almost all absent. Explanatory or supporting data are very rarely included in the available documentation;
  - ii. the results chain is unclear due to the heterogeneity of multi-institutional actions making it difficult to analyse the Theory of Change (see section 2.5 and Appendix 7);
  - iii. all the actions carried out by the partners contributing to the achievement of the outcomes, the unavailability of performance indicators with targets for the actions carried out by partner institutions not covered in the project document, are a weakness. The institutions concerned have had no or little information or communication about the project and wish to be informed;
  - iv. it is difficult to distinguish the physical actions carried out under the project at the central level, at the regional level or on the sites, which alters the reliability of the data.
94. All these elements exist, especially in the memory of the individuals who monitored and implemented them, but they remain scattered among individuals, institutions and project coordination. In other words, the project has weaknesses in communication, both external and internal.

#### **Output 4.2: Final evaluation completed.**

95. The final evaluation was carried out before the project closure on 31 December 2019, but has yet to be validated. It is regrettable that the project did not provide for a mid-term evaluation. This would have helped identify the shortcomings recorded during the implementation of the project (see SC II minutes in Appendix 5) and make the necessary corrections.

#### **Output 4.3: Dissemination of Information.**

96. A continuous exchange of information has been established between the project coordination, the national focal point at INRA and the partners of the five sites. The communication and information dissemination activities carried out were:
- i. A study tour for 25 Figuig farmers within the region of Doukkala in order to improve the understanding of irrigation water management methods.
  - ii. Participation in various events disseminating the project's achievements, including the SIAM, SIMADATTES, the seminar on sustainable mountain development organised in early October 2018, the Maghreb workshop on oasis development in November 2018, International Day for Biological Diversity, BioExpo exhibition.
  - iii. Production and dissemination of training materials on participatory plant breeding and in situ conservation of species in the five sites.
  - iv. Development of three guides on local seed production, soil conservation and date palm management.
  - v. Registration and recognition of the argan tree of Ait Souab-Ait Mansour as a GIAHS.

97. However, the mission noted partners' concerns regarding institutional communication. Indeed, the institutions concerned have very little communication about the project and wish to be informed (see Output 4.1).
98. **Assessment of Effectiveness, all components except the last one:**<sup>13</sup> **Moderately Satisfactory (MS):** The project carried out majority of its capacity building activities for conserving and reducing the use of natural resources. However, there are still some "uncompleted" activities (and not insignificant ones): the cooperatives supported by the project have not reached a basic level of autonomy (Output 3.1), and the objective of adopting the "organic" quality approach and strengthening the means of control cannot be considered to have been fully achieved (Outcome 3). In terms of outcomes, although the mitigation of natural resource degradation (Outcome 2) was satisfactory, given that the improvement of the regulatory framework (Outcome 1) was only moderately satisfactory, and the integration of biodiversity into markets (Outcome 3) is considered moderately unsatisfactory, the effectiveness of the project is poor.

### **3.3 Efficiency – EQ3: To what extent are the desired effects achieved with the least possible resources (funds, expertise, time, administrative costs)?**

**Finding 12. The signing of the convention by FAO took two years after project design. The budget initially earmarked by the Moroccan institutions for co-financing at the time of project design having been consumed, the project had to wait for the new finance law of 2016 to reincorporate co-financing in the budget of institutional stakeholders (See Table 5).**

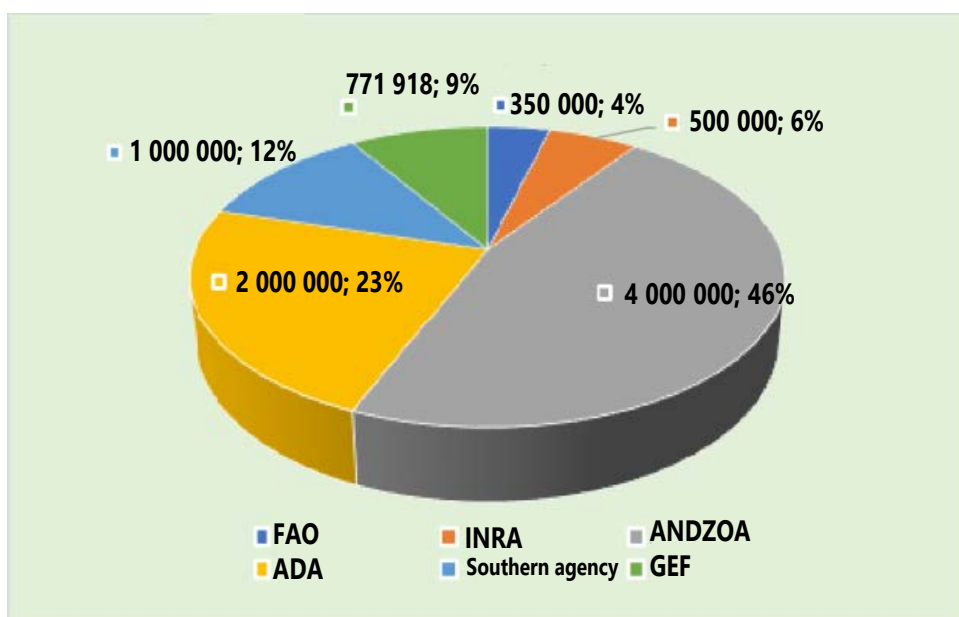
**Finding 13. The project did not rely on civil society and oasis sector committees; the involvement of civil society organisations could have contributed to strengthening the participatory approach and ensuring the support of local populations and stakeholders.**

**Finding 14. Communication within and around the project is poor. The surveys carried out by the project imply that the information is escalated from the base. However, the evaluation team noted the absence of feedback of this information to the base for the visibility of the actions. Setting up a local database could improve the capitalisation of good practices, and inform direct beneficiaries of what happened to their statements.**

99. **Financial arrangements for the project:** The initial amount of the project was USD 8 621 918 of which 91 percent was co-financing and nine percent GEF allocation.

<sup>13</sup> The rating table required by GEF (Appendix 1) considers monitoring and evaluation as separate from effectiveness; however, the project has been designed with a monitoring and evaluation component, its description has thus been included under Evaluation question 3.2, but is excluded from the overall rating of project effectiveness.

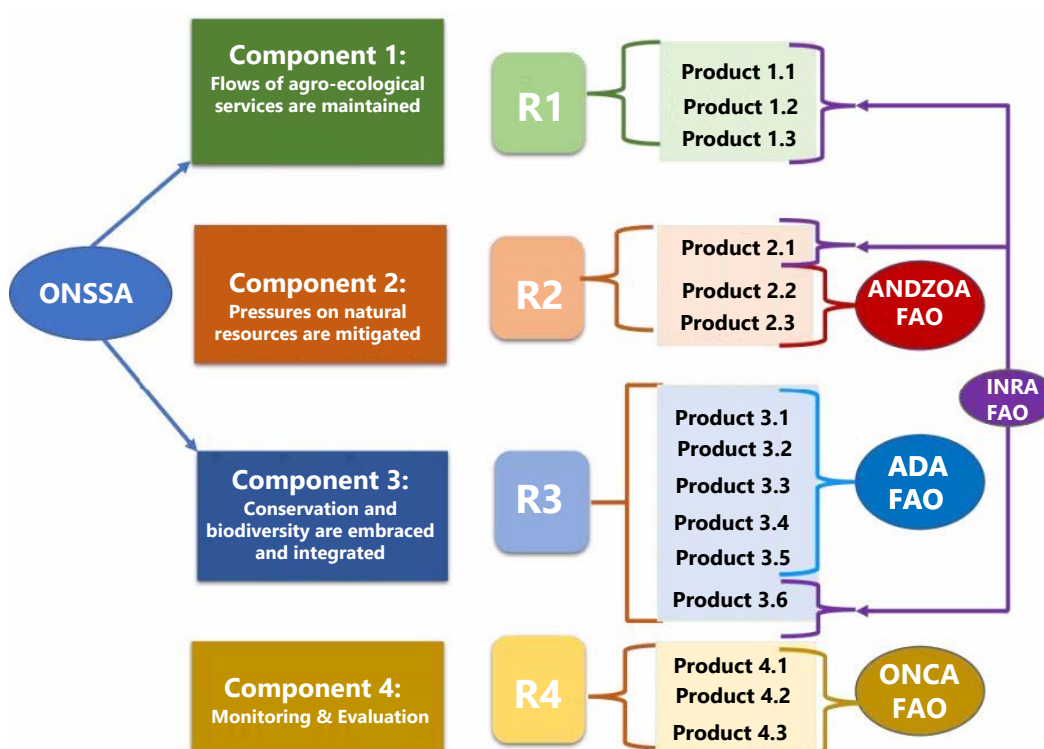
**Figure 6: Initial financial plan of the GCP/MOR044 project**



Source: Evaluation team (consultant) – based on project document

100. GEF funding has been used primarily to support institutional capacity building at the local and national levels through: training in in-situ conservation, sustainable agro-ecological production, sustainable soil management practices, sustainable water management and flood control, value chain development and marketing of labelled products. In contrast, the Government of Morocco’s in-kind co-financing in the project design covered: staff fees for the project, rooms and offices, utilities, and support for technical monitoring and awareness-raising activities.

**Figure 7: Financial arrangements for mobilising project technical assistance per output**



Source: Evaluation team (consultant) – based on project document

101. FAO has been involved in all the technical assistance mobilisation activities alongside the national institutions involved in the project. The involvement of the different stakeholders in the implementation of the project activities is as follows:
- i. **INRA and FAO** were in charge of providing technical assistance, supervision and monitoring of Component 1 (all outputs), part of Component 2 (Output 2.1) and Component 3 (Output 3.6).
  - ii. **ANDZOA and FAO** were in charge of providing technical assistance, supervision and monitoring of Component 2 (all outputs except Output 2.1).
  - iii. **ADA and FAO** were mainly in charge of providing technical assistance, supervision and monitoring of the outputs and activities of Component 3 related to agricultural processing and agricultural product promotion.
  - iv. **ONSSA** was mainly in charge of providing technical assistance, supervision and monitoring of Component 1 and Component 3 outputs.
  - v. **ONCA and FAO** were responsible for providing technical assistance, supervision and monitoring of all project activities related to capacity building (Component 4 of the project).
102. **Efficiency:** Regarding co-financing, it was foreseen in the project design in 2013 that INRA as the coordinating body of the project would take over the research activities, and that other activities not falling under its prerogatives would be taken over by the implementing and development agencies of the Ministry of Agriculture through public budgets. However, when the FAO signed the convention two years later, the budget initially earmarked by the Moroccan institutions for co-financing at the time of project design had been consumed. The project had to wait for the new finance law of 2016 to reincorporate co-financing in the budget of institutional stakeholders (See Table 2.5 and Appendix 4 without GEF or FAO contribution).

**Table 5: Financing plan of the project**

Financing plan	Planned financing USD	Financing carried out USD	Achievement rate %
GEF	771 918	771 918	100
FAO	350 000	50 000	14.29
Central level	7 500 000	12 177 500	162.37
ADA – Green Morocco Plan (GMP), Pillar II	2 000 000	4 617 500	230.88
ANDZOA – Improvement of agricultural production in Oases	4 000 000	7 500 000	187.50
INRA – Agricultural and Environmental Research Programme	500 000	60 000	12
APDESPS – Southern Oasis Development Programme	1 000 000	-	0.00
Regional and provincial level	2 000 000	3 327 300	166.37

Financing plan	Planned financing USD	Financing carried out USD	Achievement rate %
TATA DPA	-	88 850	
Figuig DPA	-	737 700	
Tiznit DPA		99 950	
ORMVA TAF		2 400 800	
Total Budget	8 621 918	16 326 718	189.36

103. **Co-financing carried out:** The final co-financing has reached, as of 30 June 2019, the amount of USD 16.3 million which could evolve to USD 18 million by the end of December 2019, depending on possible activities in progress and/or in preparation; i.e. an increase of 189 percent compared to the planned budget. This very important change that occurred during the implementation of the project is partly due to the budget review of the co-financing to support the project after its effective start in 2016. This enabled national institutions to integrate and intensify additional actions in the five project sites such as: hydro-agricultural development, drinking water supply, opening-up, cultural education, education, and flood damage repair.
104. Morocco has been able to fulfil its financial commitments by making harmonious use of its budgetary expenditure procedures. This co-financing represents USD 20 against USD 1 from GEF, a financial contribution four times higher than GEF requirements. This shows the efforts made to catch up with the schedule in the development of Oases, which was outside the scope of the national strategies when the project was designed and initialised. These figures were provided by the administration and the project team: the evaluation team does not question them (GEF directive).
105. However, FAO was unable to mobilise and provide all the planned funding by 30 June 2019. Several activities have started; this may improve the commitment rate by the end of December 2019.
106. **Limits to efficiency:** The project implementation mechanism consisted of: a SC; a National Coordination led by INRA; Technical Working Groups (TWGs); Regional Project Management Committees (RPMCs); specialised consultants to assist the Project in the implementation of the various programmed actions; and managers and technicians of DPAs and ORMVA TAF (the latter are in charge of interacting with the beneficiaries). Efficiency was limited at several levels of project management:
- i. the delay of almost three years before the effective start of the project, endemic in Morocco (delays in the signature of conventions in particular - the date of validation by the CEO was 9 January 2014. It took until 27 May 2015 to validate the PPRC and the project effectively started on 1 April 2016 - see Box 1) required enormous efforts to remobilise partners and to manage the tensions between the national project coordination without institutional anchoring in the project sites (except in Er-Rachidia) and the implementing and development agencies with essential institutional structures in the field;



- ii. a SC which met only twice (July 2016 and May 2017) without, however, any follow-up on the decisions taken at its meetings;
  - iii. except an information meeting at the start of the project, neither the Regional Project Management Committees (RPMC) nor the TWGs really functioned; an important coordination space, whose proximity between the sites and the beneficiaries was an asset, was cancelled. The project simply avoided/omitted to rely on these civil society and sector committees. The involvement of CSOs could have contributed to strengthening the participatory approach and ensuring the support of local populations and stakeholders. The local development of Oases depends very much on bringing together the creative, technical and financial capacities of all the potential partners in a single municipality (the territorial unit most commonly chosen) or site to think, plan and carry out together actions and objectives of common interest. If it had been implemented, the approach advocated by the project would have enabled the promotion of oasis and mountain areas of the High Atlas, for a better match between the needs of the populations and the achievements;
  - iv. the absence of a mid-term evaluation to reorient the project is strongly felt, especially since the project experienced difficulties in starting up and coordinating with the other partners;
  - v. FAO LTOs were changed three times during the project and not all of them had the opportunity to visit the sites (this was the case of the last two LTOs). The LTO changed one year after start-up because of their approach to the execution of technical tasks.
107. Furthermore, the project is primarily operating in areas less affected by sectoral actions and experiencing significant delays in the area of human development. The project actions address all sectoral strategies and policies in an Oasis and should be a centrepiece of action with CSOs, elected officials, and local and regional institutions. In the project, it is difficult to highlight the complementarity of the actions and the imperatives of convergence. This is also true for the central institutions of the Ministry of Agriculture, which were not involved in the implementation of the project.
108. **Communication:** The ministry in charge of the project is the Ministry of Agriculture, but the focal point of GEF, the main donor of the project, is at the Ministry of the Environment. Institutional communication between these two stakeholders is not fluid. Similarly, communication and feedback between the project team and the beneficiaries is not always clear (e.g. the evicted cooperative). A lack and difficulties of communication were also raised in the field regarding the various consultations carried out by the project, without the involvement of regional and provincial services in the preparation of the ToRs, the validation of reports or access to the consultation reports for information purposes. The surveys conducted by the project were carried out by the staff of provincial and regional institutions among the beneficiaries, which implies that information is escalated from the local base to feed the information system. However, the evaluation team noted the absence of feedback of this information to the base for the visibility of the actions. This could help to set up a local database that could improve the mechanism for capitalising good practices, and to inform direct beneficiaries of what happened to their statements.
109. This end of project results in difficulties in supporting and caring for the beneficiaries. It hinders the capitalisation of good practices and the improvement of the site selection process, implementation of activities and stakeholder participation around a theme that should be, by nature, federative. These challenges are mentioned in the PPR and PIRs and

are attributed to the atypical, multi-institutional and multi-stakeholder nature of the project. Of course, the actions listed as contributions by the various partners have led to a significant increase in the value of co-financing, but no proof has been provided of any upstream programming, clearly communicated and attentive to the needs, which would aim to carry out activities within the same framework.

#### **Overall assessment of efficiency, implementation and execution (three ratings):**

1. Efficiency, **Moderately Satisfactory (MS)**: The project suffered from start-up delays. The date of validation by the CEO was 9 January 2014. It took until 27 May 2015 to validate the PPRC and the project effectively started on 1 April 2016 (see Box 1). This has highly impacted project performance.
2. Overall quality of implementation and adaptive management, **Satisfactory (S)**: The financial arrangements for mobilising complex technical assistance turned out to be adequate, although some weaknesses in communications were noted.
3. Quality of implementation, **Satisfactory (S)**: However, it should be noted that better involvement of civil society organisations could have both had a positive impact on the project and alleviated some of the communication difficulties encountered.

### **3.4 Sustainability – EQ 4: To what extent will the benefits resulting from the project continue after its closure resisting risks in the long term?**

**Finding 15. Many project activities are uncompleted (out of the 60 planned activities, 21 were not completed at the time of the final evaluation); this would tend to cast doubt on the sustainability of the project's achievements. However, thanks in particular to ANDZOA's commitment and remit for the project and its approach, the evaluation team does not question the sustainability of the project.**

110. Sustainability of Project MOR 044 is examined at the level of four key aspects: political, institutional, technical and financial. All four must be addressed simultaneously to sustain the project's achievements.
111. **Politically**, the project reinforces Morocco's multiple actions. Significant progress has been made in recent years in Morocco in the environmental field, particularly through: the establishment and updating of strategic visions in environment and sustainable development; the strengthening of institutions; and the promotion of multiple programmes in the most significant aspects of the environment such as biodiversity conservation and the sustainable use of natural resources.
112. Morocco has developed a legal arsenal for biodiversity conservation (Law 39-12 on the organic production of agricultural and aquatic products) and actively relies on international cooperation to finance: agriculture and conservation projects (case of the PDRMA financed by IFAD funds); the development of resilient pastoral ecosystems (Green Climate Fund); and the implementation of numerous Pillar II projects with a component related to climate change adaptation and biodiversity conservation.
113. These multiple initiatives remain, however, insufficient in relation to the important issues currently weighing on biodiversity and hampering its development, particularly in oasis areas. This is why public authorities will certainly continue to invest in this path: the political

sustainability of development and the future of upcoming generations are at stake. Project MOR 044 is part of this logic and contributes to strengthening advocacy for the preservation of oases.

114. **Institutionally**, the stakeholders involved in the environmental field in general, and in biodiversity in particular, must be increasingly strong and equipped. They currently benefit from several supports and will continue in this momentum of progress and development. National institutions have the capacity to respond continuously and favourably to the multiple and ever-increasing pressures on biodiversity.
115. Project MOR 044 has the peculiarity of developing specific tools for the biodiversity conservation and the sustainable use of natural resources in the Oasis and High Atlas Mountains areas. These tools – which are essential for planning, participatory implementation, monitoring, evaluation and, in general, decision-making support – promote the implementation of policies in the environmental field.
116. In this respect, the approach developed by the project is capitalised by the implementation of national strategic plans in the field of biodiversity, in particular: the INRA Medium-Term Research Plan (2021-2024), the ONDZOA strategy, the ADA strategy for the marketing of solidarity agriculture products, International Centre for Agricultural Research in the Dry Areas (ICARDA) programme in Morocco for crop pollination, including date palm, by insects (in particular bees).
117. It should be pointed out that during the BioExpo exhibition organised in Morocco, the Club of Organic Entrepreneurs signed an agreement with the GCAM (Groupe du Crédit du Maroc) aimed at supporting the club members in the development of their activities: production, processing and marketing of organic products. The Club also signed a Letter of Understanding with the FAO to consolidate the option of organic production at the level of oasis and mountain areas in Morocco. This FAO partner can play an important role in marketing the products from the five sites.
118. Despite the large number of strategies, action plans and tools for biodiversity conservation, particularly in Oases, many are uncompleted: their sustainability depends on a significant improvement in the modalities of multi-actor and multi-institutional management in terms of availability but also sharing. Only a strong political will, supported by considerable individual and institutional capacity building could help overcome the current difficulties of integration and convergence of sectoral policies and strategies. Institutional stability is required in this area, supported by ANDZOA, whose mandate focuses on the oasis areas.
119. **Financially**, the prospects for sustainability appear to be met provided that the ownership of the oasis development process as a whole by local institutions and beneficiaries is further consolidated. Morocco gives high priority to these less-favoured areas through the creation in 2010 of ANDZOA and by entrusting it with multisectoral missions exclusively in oases: this reduces the financial constraint often present in sustainable development projects.
120. Moreover, it is important to point out that the organic labelling and certification for the use of this logo by direct beneficiaries represents a significant cost, currently provided by Project MOR 044 and which, at the end of the project, will have to be covered by the producers. The cost of organic certification amounts to MAD 300 per producer and MAD 30,000 for the health certificate of the valorisation units. This means that it is important,

indeed urgent, to continue to support the producers, during at least the two agricultural years following the end of the project, until marketing is completed. At present, only the Technical Director in Morocco of the CCPG Company – which has provided organic training for producers and ensures external control and certification – is trying to find, free of charge, potential buyers for Oasis organic products. This relationship is not enshrined in a collaboration contract. The financial sustainability of the project is at stake.

121. **Technically**, the decentralised services of the Ministry of Agriculture have approved capacities for water resource management, climate change adaptation and resilience, agricultural techniques and rural animation. All of these factors are conducive to technical sustainability.
122. However, support and coaching of beneficiaries is the responsibility of ONCA, which operates according to an annual programme that does not take into account the real and factual needs of Oases. It can be assumed that ONCA will play a role in the technical and economic supervision of producers, and that ODCO will mobilise, as stipulated in Law 112-12 relating to cooperatives, to support the structuring of producers and their accompaniment at the legal level (status, bookkeeping, etc.). Pending a redeployment of their agents in the field and the integration of biodiversity in their remit, it will undoubtedly be necessary to call upon external expertise to support the producers of the project sites to access organic markets, which are more remunerative.
123. Moreover, the sustainability of the project also depends on potential natural risks, such as: the control of frequent fires in the Akka oasis; the fight against locusts at the source to avoid chemical treatments in southern Morocco and the resulting loss of biodiversity and organic quality; and the management of repeated floods in Imilchil - Amellago.
124. **Overall assessment of sustainability: Moderately likely:** Many activities are still to be completed (out of 60 planned activities, 21 are uncompleted), but given ANDZOA's remit, all the public parties concerned by oases will be mobilised for sustainable local development and, above all, for the maintenance and generalisation of the project's benefits.

### **3.5 Other factors impacting on implementation – EQ5: What significant changes has the project made at its closure and what steps have been taken to progress towards long-term impacts?**

**Finding 16.** Thanks to the project, new dynamics of production and, above all, of consultation and integration have been initiated. Planning and decision-making support tools are increasingly used by the stakeholders in charge of biodiversity in general and in particular, in Oases.

**Finding 17.** It is premature to expect immediate impacts in a project to conserve biodiversity and mitigate pressure on natural resources. However, the project has already produced some direct and indirect impacts in the area.

**Finding 18.** Several new initiatives, partnerships and mechanisms have been launched thanks to the project, in particular the GIAHS accreditation, which was closely associated with it (see Finding 2, and Finding 20).

125. **Capacity Building:** Overall, new dynamics of production and, above all, of consultation and integration have been initiated. Planning and decision-making support tools are increasingly used by the stakeholders in charge of biodiversity in general and in particular, in Oases. Thematically, biodiversity conservation and enhancement, the solidarity economy, and climate change hazards in the development of oases are increasingly taken into account in sustainable development planning.
126. The training provided by the project has strengthened the capacity of technicians and producers. Changes in practices and performance for the development of the organic value chain (in all sectors and on all sites) have already been noted. These actions will be consolidated and reinforced by "targeted continuing education" and "Field school" training provided either by the project or by project partners such as ANADZOA, which takes up some of the training developed and provided by the project.
127. **Biodiversity conservation:** It is premature to expect immediate impacts in a project to conserve biodiversity and mitigate pressure on natural resources. However, the project has already produced some impacts:
- i. **Direct impacts:** There has been an improvement in the planning of biodiversity protection and restoration in line with the economic and social inclusion of beneficiaries to improve the attractiveness of oases (thanks in particular to the GIAHS designation).
  - ii. **Capacity building of technicians and producers has led to changes in practices and performance.** For example, it has been noted the gradual adoption of the "organic" quality approach. This is likely to rapidly change the landscape and the economic situation in oases, if support and coaching efforts are maintained and strengthened to work with producers along the value chain, in particular to address downstream market concerns. The momentum has indeed been set in motion by the project, but the trial, which was planned, has yet to be successful.
  - iii. **Indirect impacts:** The project promoted the development of a heritage conservation/preservation/restoration approach that is transferable to other oasis sites. It also supports resilience capacity at the five project sites (among others, through the GIAHS approach and certification). A regulatory framework currently being approved is likely to sustain the project's achievements in terms of conservation, multiplication and marketing of local seeds.
128. **Partnerships and initiatives:** Several new initiatives and mechanisms have been launched thanks to the project, in particular the GIAHS accreditation, which was closely associated with it (see Finding 2):
- i. the launching of the "Sustainable Oases" Initiative by the Moroccan government on 14 November 2017 during COP 22 was inspired by pioneering actions in oasis ecosystems carried out in several Maghreb countries, including Morocco, Tunisia and Mauritania, on the one hand, and by the urgent need to ensure the sustainability of oases around the world, on the other;
  - ii. ANDZOA has acquired experience in the preparation of GIAHS dossiers through the dossier on the "Agro-sylvo-pastoral system of the argan tree in the Aït Souab-Aït Mansour area" presented to the FAO. Having acquired GIAHS recognition, this site is part of the Argan Biosphere Reserve (ABR). It can be assumed that ANDZOA will take advantage of this status to present other dossiers in the ABR zone.

- iii. INRA has become a central actor in developing advocacy and preparing GIAHS dossiers. Indeed, the latter must have a solid scientific basis and rigorous argumentation that only INRA can provide, before sending them to the Scientific Advisory Group (SAG) for site evaluation and approval.
  - iv. the Ministry of the Environment, also GEF focal point, attaches particular importance to the development of oases because of its remit to represent Morocco in the management of the three CBD international conventions.
  - v. the regional project on "Adaptive management and monitoring of oasis systems in the Maghreb: Morocco, Mauritania and Tunisia" with six reference sites identified for the sustainable development of oases in North Africa. FAO, through its Sub-regional Office for North Africa, aspires to position itself as a Centre of Excellence on oasis systems, through the development of a database that will facilitate the exchange of knowledge, know-how and all types of information between countries within the framework of the Globally important agricultural heritage system (GIAHS).
  - vi. within the dynamics of Project MOR O44, a project is being carried out by ANDZOA for the construction on 3 ha of an Experimental Oasis Centre in Figuig, with the assistance of both national and international scientific bodies.
129. Overall assessment of the other factors impacting on implementation: despite their existence, these achievements remain fragile. If they are not supported by a genuine exit strategy (no follow-up or technical assistance is currently foreseen after project closure, although several institutions are able and willing to play this role), the successes underlying these partnerships might subside over time. Impacts are perceptible in terms of the dynamics initiated, but they depend on the capacity of the project to maintain the level of support and technical assistance. The absence of an exit strategy and a post-project stakeholder plan may reduce the expected impacts.

### **3.6 Cross-cutting dimension – EQ6: To what extent are gender issues (broadly defined) and CSO involvement taken into account in project design and implementation?**

**Finding 19: Although FAO standards, including SEGA (Socio-Economic and Gender Analysis) were strictly applied, there was no real integration of gender issues at the design of the entire project – despite the fact that some activities did have gender-related elements**

**Finding 20: It was only during the implementation of project activities that the quality of the envisaged partnerships with civil society turned out not to be in line with the project document (see however finding 18 concerning all the partnerships)**

130. **Addressing gender issues in project design and implementation:** The literature reviewed showed that the gender approach was not very visible throughout the life of the project as a founding aspect. Unfortunately, there was a lack of a data collection system during project implementation for gender analysis. At the level of each activity, especially with regard to training, an effort was made to include women. However, due to the role of Moroccan women in agriculture, the evaluation team considers that the gender issue was only superficially addressed and notes that the participatory work and dissemination of results is not documented.

131. Generally speaking, Moroccan rural women play an important role in agriculture, especially on family farms, which include oasis systems. The women encountered in the five project sites are generally responsible for small-scale animal breeding, market gardening and fruit harvesting (date collection). Women in poorest households are forced to cut grass or collect fodder from agricultural plots, which enables them to feed their animals and contribute to the maintenance of the plots. In addition to the household chores, women are also active in handicraft activities (palm carpets, sewing). The project aims at improving the socio-economic empowerment of women by targeting women's cooperatives and groups through income-generating activities.
132. There are women's groups in the project sites with which the project interacts, such as:
- i. several associations and cooperatives (beekeeping, aromatic plants, livestock, carpets);
  - ii. cooperatives for processing and adding value to local products programmed in the project (cereals, dates, apples, wool);
  - iii. the "Tamount" cooperative on the Imilchil site, which benefited from training in couscous making;
  - iv. a group of women practising phoeniculture in Akka was to receive training and tools (pruning shears, palm pollination, scales). This training was not carried out;
  - v. a group of women from Figuig Oasis who benefited from the acquisition of a herd of D'man sheep of 68 heads, 66 of which were females;
  - vi. the women's cooperative (Tamount) in Figuig, which has created a unit to enhance local products;
  - vii. the women's cooperative in Ait Mansour, which has benefited from the drying of local agricultural products as well as aromatic and medicinal plants.
133. The project has effectively initiated a consultation to analyse all gender aspects and their consideration in the conservation and management of natural resources in Oases. The result of this work is very descriptive; it does not bring new elements and does not conform to the standards of gender studies. The study carried out remained at the stage of raw surveys without any real analysis. Consequently, although FAO standards, including SEGA (Socio-Economic and Gender Analysis) were strictly applied, there was no real integration of gender issues in the project, despite the various existing practical guides for the analysis of productive and community functions specific to women.
134. The evaluation team therefore considers that the skills required for a gender approach were lacking in this project, despite the majority presence of women in all the project's actions, on the farms, and in some of the valorisation units.
135. **Involvement of civil society organisations:** Morocco has a network of environmental protection associations in the development phase in the various sectors and at the level of all regions. However, it should be noted that, in general, CSOs in charge of environmental issues are weakly involved by public authorities in concrete projects to implement environmental policy. They are often assimilated to awareness-raising and communication relays, rather than stakeholders in environmental initiatives or project implementation.
136. The involvement of civil society in Project MOR 044 was foreseen and widely mentioned in the project document, arguments, outcomes and action plan. Several organisations or

members of civil society were identified as partners in the project at the time of its design (this does not include agricultural cooperatives with income-generating activities affiliated to the project). These organisations are:

- i. NGOs that work directly with local populations (among others, ADRAR) through community mobilisation, local capacity building, sharing of lessons learned. As part of the Stakeholder Committee (SC) and the Regional Project Management Committees (RPMCs), they will be called upon to play a "key role in the implementation and monitoring of activities at the pilot site level";
  - ii. the families of small farmers in the pilot sites;
  - iii. representatives of farmer-breeders belonging to several ethnic groups divided into several tribes;
  - iv. representatives of producer organisations (farmers, breeders) that are part of the SC and are expected to play an active role in the decision-making processes within the RPMCs.
  - v. customary institutions (*Jemâa*) with a role in planning and mobilising local populations in traditional systems of social water management. As custodians of ancestral practices and traditional knowledge systems, they are part of the RPMC and would have been actively involved in Component 2 activities.
  - vi. economic interest groups (EIGs) of small producers that can facilitate or develop the economic activity of their SC and RPMC members.
137. It was only during the implementation of project activities that the quality of the envisaged partnerships with civil society turned out not to be in line with the project document. There was no real collaboration with civil society organisations, which are supposed to partake in RPMCs and the SC as recommended by the project designers. On the basis of the interviews conducted and the project documentation, there were no regional associations or civil society structures recognised at the level of the regions affiliated to the project. Civil society organisations were absent from the first meetings of the governance bodies set up by the project (see the minutes of meetings).
138. **Knowledge management:** Local traditional seed-related knowledge is a cumulative body of knowledge, skills and practices developed by a specific community in one of the five sites and applied to sustain its livelihoods.
139. Beyond their identification through the surveys carried out by the project, the evaluation team did not perceive a strategy for preserving this knowledge, including the techniques used, for promoting this knowledge within local and regional networks and for creating tools to share this knowledge. Nor did it perceive an identification of the resource persons who are the depositories of this knowledge and their mobilisation in the process of transmitting this knowledge to others (particularly young people). Nothing has been planned to limit the alienation of knowledge holders from farm council programs, whose messages may be different or even contradictory to them. Finally, no effort has been made to explain this intangible knowledge through illustrated materials or practitioner's guides.
140. The project generated very important, relevant and specific knowledge (start of a database, good practice training, see Appendix 6 for a complete list). However, the management of this knowledge could not be done, mainly because there was no communication strategy



and no stakeholder engagement plan. The result was a communication deficit at all levels: local, regional and national.

141. **Complementarity with other similar projects in the country:** Bilateral and multilateral cooperation agencies are also active in Morocco in the environmental and biodiversity fields. The lack of visible cooperation at this stage between the different interventions in the environmental and biodiversity fields is an obstacle to the coherence of interventions (see Appendix 8).
142. Since its accession to GEF in 1994, Morocco has received sustained support from GEF to meet its obligations under the Multilateral Environmental Agreements and to protect and improve the quality of the local environment.
143. Between 1997 and 2016, GEF was able to finance more than 39 national projects in Morocco for a total amount of about USD 138 million, of which 27 percent (more than USD 37 million) were dedicated mainly to agriculture and implemented by the Ministry of Agriculture and Maritime Fishing (MAPM), in particular through the organisations under its supervision (INRA, ADA, ONSSA, ANDZOA).
144. Moreover, Morocco, as a country vulnerable to climate change impacts, benefits from the support of the Green Climate Fund (GCF). As such, Morocco has submitted 6 projects to the GCF for financing, including 5 for the agricultural sector.
145. Currently, the only project approved concerns the financing by GCF of the "Development of Argan Orchards in a Degraded Environment (DARED)" for an amount of USD 39.3 million (i.e. 80 percent of the total project cost estimated at USD 49.2 million). The overall objective of this project is to strengthen the resilience of rural communities and the preservation of the Argan Biosphere Reserve (ABR). This project is executed by ADA as GCF implementing agency and is implemented by ANDZOA as the National Implementing Agency over 6 years (2017 to 2022).
146. **Overall assessment of cross-cutting dimensions:** Despite multiple GEF projects and the fact that many of these are already underway or planned to maintain development actions in the oasis areas, the partnerships (or not) with civil society organisations have not had the desired effects. It should be noted that specific activities have not been carried out on knowledge management, and the gender approach has not been taken much into account.

## 4. Conclusions and recommendations

### 4.1 Conclusions

#### **Conclusion 1. Relevance: The project is innovative and appropriate.**

147. Project FAO/MOR 044 came at a pivotal moment in Moroccan agricultural development of marginal areas directly exposed to climate change and biodiversity loss. Indeed and after more than a decade of implementation of the Green Morocco Plan for the sustainable development of agriculture in Pillar I – relating to modern and productive agriculture – and Pillar II – relating to solidarity agriculture –, it had become essential to think about oasis areas as they are not included in the agricultural development strategy and therefore do not benefit from Government aid and public investment. The project offered an opportunity to carry out, for the first time in oases, a simultaneously integrated action: land use planning, conservation of indigenous knowledge and know-how, maintenance of oases, and enhancement of the productive system. The project and its relevance could nevertheless have been strengthened by a more balanced intervention logic in terms of its objectives and the duration of its implementation; yet, the contribution to the current political discourse on oases and the pioneering role in the use of GIAHS certification are important achievements.

#### **Conclusion 2. Relevance: The project relies on GIAHS certification to achieve its objectives: because of initial delays as well as the dispersed and landlocked nature of the sites, all certification processes – though initiated and ongoing – have not all been completed, creating differences in timeliness.**

148. The efforts made by the project for the GIAHS labelling of oases has so far resulted in the recognition of the Imilchil - Amellago and Ait Mansour sites. The sites of Figuig and Akka are almost GIAHS certified. Thanks to the GIAHS initiative, these sites can not only attract national and foreign investment to boost their conservation activities but also set up mechanisms to mobilise funding, such as payments for ecosystem services or the application of the polluter pays principle. The Assa site has not started the GIAHS certification process and therefore cannot claim the same benefits. The impact of the project, due to its choice of sites, is therefore very heterogeneous (Finding 2).

#### **Conclusion 3. Effectiveness: Labelling. Despite its delays, the project helped achieve organic agriculture on the project sites, though not always certified (Findings 1 and 2).**

149. Concerning biodiversity conservation, thanks to the project, farmers have acquired proven, ancestral skills in selecting and conserving varieties adapted to the soil and climate conditions of each site. The activities carried out have made it possible to consolidate local knowledge and to inventory, identify and store the Oasis local seed varieties in the gene bank. In addition, efforts were made to prepare and try to adopt specific regulations for local seeds, but, due to administrative bottlenecks, the action was not fully successful. The delay in the adoption of the regulations does not call into question the seed system in Oases; it continues to operate at its usual pace and the Oases thus practice de facto organic but not certified agriculture.

150. Territorial labelling encourages local initiatives for biodiversity conservation and sustainable use. Public authorities have a significant role to play, alongside label managers, in supporting small producers in these market segmentation strategies and in working with

them towards national sustainability objectives through public procurement or changes in regulations. The limited financial means of producers in traditional oases may hinder product certification, given that some producers find the recurrent certification costs expensive.

**Conclusion 4. Effectiveness: Access to markets/improvement of living standards. Apart from crop labelling (Conclusion No. 3), the project aimed to promote biodiversity integration into markets (Outcome 3), notably through organic labelled agriculture. But several activities are still uncompleted, compromising the project's effectiveness (Finding 8).**

151. The project has linked biodiversity conservation with the improvement of farming conditions of soil, water and genetic material resources, in order to improve the economic and social situation of the beneficiaries. The project sought to integrate biodiversity conservation and sustainable use into the local strategies for economic diversification in the oasis landscape, but it was unable to achieve this. Furthermore, the evaluation team noted neither any project impact on existing networks, nor any market prospecting by the project with a clearly defined strategy, such as a possible agreement with prospects or Terms of service for organic labelled products specifications (size, quantity, etc.). One of the expected outcomes is therefore not achieved, and reaching the final outcome depends on possible external actions (ANDZOA support which is reasonably sure, ONCA support which is less certain) but not guaranteed.

**Conclusion 5. Efficiency: The project suffers from poor communication both externally and internally.**

152. Internally, the project has set up a centralised information system at INRA and FAO in Rabat. The information that feeds this system comes from very important surveys concerning all physical, human, management, and production aspects in Oases. However, with the exception of Tiznit, the database is not installed in the other DPAs (Provincial Directorate of Agriculture) nor in ORMVATAF (Regional Office for Agricultural Development of Tafilalet) – despite the fact these surveys were carried out by the staff of these institutions. In addition, there are institutional communication difficulties both between ministries (the project is under the supervision of the Ministry of Agriculture, but the representative of the main donor, the GEF focal point, is at the Ministry of the Environment), and between the project and its beneficiaries (Finding 14). Moreover, the lack of real collaboration with CSOs that are supposed to partake in the RPMCs and the SC as recommended by the project designers, hinders the communication of the project. This hinders project visibility by not being visible among important stakeholders in the field (Finding 13).

**Conclusion 6. Sustainability: As progress on the sites is uneven, the sustainability of the project interventions is also uneven; however, the promotion of oasis cultures needs to be supported and sustained.**

153. Concerning the promotion of local products, it should be emphasised that one of the key actions of the project is the integration of producers in organic agriculture, requiring skills acquired and transmitted by the project. For this reason, the conservation cycle addressed by the project is in its early stages. Its sustainability depend on: the income achieved by the producers (depending on an uncertain market opening, see Conclusion 4); their capacity to bear the financial costs of the label (see Conclusion 2); and the interventions of the agricultural advisory services (adequate technical assistance). The project has built the development and marketing activities on existing cooperatives/associations in the area.

These farmers' organisations are at different development levels. With the exception of Figuig, where both level of social cohesion and management quality are high, the other sites require an upgrading of cooperatives/valorisation units (efficiency, component 3). The uncertainty whether the farmers' organisations and/or associations supported by the project will take charge of activities downstream of the agricultural value chains in the five sites and the current indicators do not bode well for these cooperatives to become the real owners of their development projects. It should be noted, however, that the creation of ANDZOA and its involvement in the project is conducive to the sustainability of the project's achievements.

## 4.2 Recommendations

154. Immediately after the completion of Project FAO-MOR 044, the evaluation team considers that the next step in promoting action in the field of biodiversity conservation and preservation in Moroccan oases, should build on the current achievements. Whatever its form and functioning, this action will focus essentially on four aspects: (i) strategy and organisation; (ii) socio-economy; (iii) governance of biodiversity and sustainable development, (iv) and communication.

**Recommendation 1. Strategic and organisational aspects (based on Conclusions 2 and 5, addressed to FAO, GEF, the Government, and partner organisations) – Capitalise and disseminate/expand the GIAHS initiative, the tools developed and implemented within the framework of Project MOR 044 and its outreach to all sustainable development stakeholders in oases; generalise this approach.**

155. Action in the field of biodiversity and sustainable development can only be ensured and carried out effectively when carried out within a frame of reference and coherent logic and, above all, approved by all the stakeholders involved in the development processes. This has now been achieved within the framework of MOR 044, and specifically through the FAO's GIAHS concept. This strategy for biodiversity conservation developed within the framework of the project should be publicised. It should be brought closer to all the stakeholders at the national, but also regional and local levels so that it is recognised as a guideline and so that the various stakeholders gradually end up using it and referring to it at each level of their planning and actions (as initiated by the project). Only then can it become a real national biodiversity conservation strategy for all stakeholders.
156. ANDZOA in particular, because of its mission, will have to capitalise on emblematic experiences and make an effort to consult with stakeholders, especially local elected officials and direct beneficiaries. This consultation will help these stakeholders to integrate in a concrete and wide-ranging way the GIAHS dimension into their strategies and daily practices, as it is currently the only approach for the sustainable development of oases. The generalisation and anchoring of this approach in the country's oasis regions will inevitably have to take into account social components on the basis of their specificities. This effort will enable the parties concerned – public institutions, elected officials and NGOs – each in their respective region, to identify with the strategy through the creation of a framework responding to their specific challenges.

**Recommendation 2. Socio-economic aspects (based on Conclusions 3 and 6, addressed to FAO, GEF and ANDZOA) – Build technical, financial, commercial and economic management capacities related to income-generating activities through technical and financial feasibility**

**studies, in order to enable full autonomy after 5 years of support; finance at 100% the certification of oasis products through the Agricultural Development Fund.**

157. The activities implemented by the project remain at a crossroads as long as the assigned objectives are not fully achieved, especially regarding social and economic dimensions. At the end of the project, organic producers have not yet marketed certified organic products. The cooperatives and valorisation units are struggling to position themselves. After the project, ANDZOA in particular, because of its mission, will have to enhance action by highlighting its socio-economic dimension through the promotion and continuation of the organic quality approach. This will have to continue until the approach is fully integrated or at least until it has gained access to the market so enabling a green and circular economy through creation of the necessary conditions for its emergence and growth. A targeted and open Public-Private partnership could be an opportunity in this direction.
158. This would allow on the one hand the sustainability and profitability of the valorisation investments. Indeed, a significant number of income-generating activities were carried out prior to the implementation of the project, and a large number of the cooperatives visited benefited from various types of financing (MAPMDREF, international cooperation, etc.), or relied on a "driving" individual. Very often, due to the delays incurred, the pace of implementation had to be accelerated. This proactive approach – positive in terms of physical achievements – has nevertheless led to problems in several of these income-generating activities, particularly in terms of technical, financial, commercial and economic management capacities. The few cases encountered reveal that the income from these activities is complementary to other sources of income. Consequently, for new AP/OP/UV creations or income-generating activities promoted and developed by the project, technical and financial feasibility studies must be carried out beforehand, which provide for full autonomy after 5 years of support. The information provided by these studies should be an important element in the selection and economic inclusion process.
159. Simultaneously, this would allow the labelling of territories, where public authorities have a significant role to play, alongside label managers, in supporting small producers. This role must be accompanied by means enabling producers to certify their production. The evaluation team proposes that the certification of oasis products be financed at 100% through the Agricultural Development Fund, especially as the producers concerned are generally excluded from the current incentive system.
160. In addition, the training provided by the project reaches a large number of civil servants, farmers and farmers' organisations and/or agencies through "mass training" on very broad themes. It would be desirable to set up a continuous training programme supported by a monitoring system targeting those involved ( according to real and practical needs), in order to evaluate the impacts of these trainings, to promote the transfer of know-how on the part of the beneficiaries and to reinforce the project's achievements. This training could be delivered by ANDZOA with the support of ONCA.

**Recommendation 3. Environmental governance aspects (Based on Conclusions 1 and 6 addressed to FAO, GEF, and the Government) – Effectively integrate civil society organisations in biodiversity and sustainable development actions and make them a privileged and essential partner.**

161. It is crucial that different institutional stakeholders and other parties concerned interact together for common objectives given the following: the relevance of the project; the fact

that the promotion of biodiversity and sustainable development is conditioned by an efficient level of governance; and the level of the institutions in charge of agriculture, biodiversity and sustainable development and their efforts to integrate their sectoral policies. A systematic involvement of civil society organisations is advocated. It is essential to effectively integrate civil society organisations into biodiversity and sustainable development actions and to make them a privileged and essential partner. In a concrete way, it is necessary to focus in this direction during future development projects in the oases, particularly if they concern the reinforcement of the participation of young people and women in the development process. Furthermore, the evaluation team regrets that the project did not carry out a mid-term evaluation and suggests extending this practice to all projects in order to reorient project activities and update the logical framework, indicators and stakeholder involvement.

**Recommendation 4. Communication aspects (Based on Conclusion 5, addressed mainly to FAO and GEF) – Promote better institutional communication on other projects, but above all, support communication efforts on biodiversity and sustainable development in partnership with the Government, so as to maintain and deepen the project's achievements.**

162. The project has suffered from weaknesses in institutional communication, particularly with stakeholders at the central and regional levels. The evaluation team proposes to promote communication for governance in the fields of biodiversity and sustainable development (campaign or other communication effort). This would reinforce the change in behaviour and in the planning of field operational modalities initiated by the project. Messages and communication products will also be developed and disseminated in all administrative, professional, social, school and university environments. Computer and digital tools would in this sense constitute an essential vector to disseminate information. This communication would make it possible to publicise the GIAHS approach and to dispel any confusion between the GIAHS accreditation on which the project's approach is based and the project itself. This increased communication could also strengthen the links between local development stakeholders, including civil society organisations and elected officials.

## 5. Lessons learned

163. The delays in the implementation of project activities and, especially, in supporting producers until the achievement of the first outputs, were mainly due to: (i) the time lag between the drafting date and the signing date of the convention by FAO; (ii) the mobilisation of co-financing; and (iii) technical coordination, which changed after one year of operation without being able to ensure the effective start of the project. As a result, the schedule has been constantly adjusted to remedy this situation. There were also delays in carrying out activities to support farmers who have joined organic production until the necessary authorisations are obtained and the first production sold.
164. The lessons learned from this project, which can be applied to other similar projects, are as follows:
- i. A logical framework that is oversized in relation to the duration of the activities and that includes a participatory working approach with beneficiaries and CSOs, requires a longer time frame.
  - ii. Conducting numerous studies, without first checking with partners and international cooperation agencies whether or not such studies may have already been carried out, does not serve the effectiveness of the project (double work).
  - iii. The lack of a Stakeholder Engagement Plan and the institutional changes (change of the LTO) made it difficult to plan to meet the ad hoc needs of the beneficiary population and favoured upstream work, focused on training and studies, carried out by external expertise. This was at the expense of the achievements initially planned.
  - iv. The current extension works of date palm plantations in modern spaces, within oases, require labour force and setting up of valorization and packing units by the private sector. In order to reduce land pressure in oases, it would be interesting to analyse the possibility of prohibiting anarchic building in this area and to orientate urbanization towards uncultivated land which is very abundant in oases.

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Réalisation physique et comptable au niveau des palmerais de Figuig. l'Aménagement hydro agricole. Exercice: 2017/2018. Marché n°: 5/2017/DPA/52	Table	2017	DPA Figuig	4
Réalisations physique et comptable au niveau des palmeraies de Figuig	Table	2018	DPA Figuig	2
Actions à entreprendre dans la zone du projet SIPAM Ait Mansour (Tiznit-Taфраout) et Akk (Tata)	Report	2017	DPA Tiznit	2
Travaux d'amenagement hydro-agricole. État des réalisations a travers la vallee d'ait Mansour (2009 - 2013)	Table	2013	DPA Tznit	1
Création d'une base de référence en matière d'aménagement Hydro Agricole.	Report		DRA Oriental DPA de Figuig	1

<b>Title of the document</b>	<b>Type</b>	<b>Date</b>	<b>Written by: Author</b>	<b>No. pages</b>
Projet GCP/MOR/044/GFF. Rapport de Mission. Composante: Chaîne de Valeurs des Céréales. Formation d'une coopérative féminine en matière de la valorisation des Céréales (Couscous et Spaghettis) Imilchil - Maroc13 - 17 Mars 2017	Report	2017	Falahi, Hafida el	16
Projet FAO-GCP/MOR/044/GFF Expertise dans le domaine de l'Agriculture Biologique. Actualisation des activités du projet et formation des agriculteurs et agricultrices en matière de l'agriculture biologique dans les sites du projet	Report	2017	Fartass, Badr el	75
FAO-GCP/MOR/GFF-SIPAM Rapport de la première mission du projet Actualisation des actions du projet par rapport aux aspects de l'agriculture biologique	Report	2017	Fartass, Badr el	9
FAO-GCP/MOR/GFF-SIPAM Rapport de la première mission du projet. Actualisation des actions du projet par rapport aux aspects de l'agriculture biologique	Report	2017	Fartass, Badr el	19
Projet: GCP/MOR/044/GFF « Conservation de la biodiversité et atténuation de la dégradation des terres par la gestion adaptative des systèmes du patrimoine agricole» Rapport final	Report	2019	Fartass, Badr el	28
Projet: GCP/MOR/044/GFF. Manuel pratique sur la démarche de certification, de mise en place de traçabilité et de contrôle interne et d'audit dans les oasis	Manual	2019	Fartass, Badr el	9
Projet GCP/MOR/044/GEF. Expertise dans le domaine de l'hydrologie et la gestion de l'eau Diagnostic, appui aux acteurs et proposition d'actions dans les sites du projet	Report	2017	Hammani, Ali	16
Projet GCP/MOR/044/GEF. Diagnostic, appui aux acteurs et proposition d'actions dans les sites du projet	Report	2017	Hammani, Ali	11
Training on Date valorisation. FAO 11-19 Feb 2017 Figuig (In Arabic)	Manual		Harrak	48
Rapport d'avancement de projet (juillet-décembre 2018)	Report	2018	Idrissi Ammari, Mohamed Abdelmajid el	49
Projet GCP/MOR/044/GFF. Contrat relatif à L'accompagnement et l'appui technique aux femmes et à leur organisation sur le site d'Ait Mansour pour la préservation et l'amélioration du savoir-faire local Livrable 1. Rapport sur Le recensement des espèces des PAM et des produits agricoles	Report		Ihlal, Mohammed	24

<b>Title of the document</b>	<b>Type</b>	<b>Date</b>	<b>Written by: Author</b>	<b>No. pages</b>
séchés ainsi que sur la description des savoir-faire locaux de séchage des divers produits et leurs utilisations				
Manuel de séchage des fruits et légumes, des PAM, préparation du couscous traditionnel, sécurité sanitaire et traçabilité	Manual		Ihlal, Mohammed	97
L'accompagnement et l'appui technique aux femmes et à leur organisation sur le site d'Ait Mansour pour la préservation et l'amélioration du savoir-faire local. Rapport final	Report	2019	Ihlal, Mohammed	22
Contribution de l'INRA dans le domaine du palmier dattier	Table	2017	INRA	2
Consultation en pédologie et cartographie des sols (Oasis Akka-Tata) RAPPORT FINA	Report	2019	Mimouni, Abdelaziz	87
Projet de Développement Rural des Zones de Montagnes de la Province d'Errachidia. Convention de partenariat n° 2/2010 relative à la réalisation des essais de démonstration de bonnes pratiques de réhabilitation des parcours au niveau des zones montagneuses de la zone d'action de l'ORMVA-TF. Rapport technique sur la fertilisation des pelouses de montagne Tissila et Motezli .Rapport de Synthèse (définitif)	Report	2015	Mrabet, Rachid; Homrani, Bakali; Abdelmonaim, Maatougui Abdesselam; Acherkouk, Mohamed	74
Projet de Développement Rural des Zones de Montagnes de la Province d'Errachidia. Convention de partenariat n° 2/2010 relative à la réalisation des essais de démonstration de bonnes pratiques de réhabilitation des pâturages au niveau des zones montagneuses de la zone d'action de l'ORMVA-TF. Rapport d'essai de plantation d'arbustes fourragers dans les périmètres de Baknou et d'El Oge .Rapport de Synthèse (Version finale)	Report	2015	Mrabet, Rachid; Homrani, Bakali; Abdelmonaim, Maatougui Abdesselam; Acherkouk, Mohamed	71
Rapport semestriel du projet 1 Juillet-31 Décembre 2016	Report	2016	Nasr, Nouredine	20
Rapport semestriel du Rapport 01 Janvier-30 Juin 2017	Report	2017	Nasr, Nouredine	35
Rapport Semestriel 01 Juillet-31 Décembre 2017	Report	2017	Nasr, Nouredine	48
Rapport semestriel du projet (1 juillet-31 décembre 2016)	Report	2016	Nouredine NASR	19
Rapport semestriel du projet (01 Juillet-31 Décembre 2017)	Report	2017	Nouredine NASR	48
Rapport semestriel n° 4 (01 Janvier-30 Juin 2018)	Report	2018	Nouredine NASR	32

<b>Title of the document</b>	<b>Type</b>	<b>Date</b>	<b>Written by: Author</b>	<b>No. pages</b>
INRA Description et caractérisation des variétés locales collectées sur les sites du projet	Report	2018	Ouabbou, Hassan	44
Réalisation des travaux au niveau de Site d'Akka, Province de Tata	Table	2015	Projet d'arboriculture fruitière (MCA)	1
Réalisations au cours des années 2015 et 2016 et celle programmées pour l'année 2017	Table	2017	Projet FAO-GEF/SIPAM Site Imilchil-Amellago	1
Projet FAO-GCP/MOR/044/GFF. Expertise dans le domaine d'Agronomie et d'agro biodiversité ELABORE PAR : Rapport/Version 20 aout 2017	Report	2017	Saidi, Seddik	134
Projet FAO-GCP/MOR/044/GFF. Expertise dans le domaine de l'Agriculture Biologique. Formation des producteurs et productrices de semences dans les cinq sites du projet sur les techniques de la sélection participative pour améliorer les variétés locales et préserver une base génétique large pour la conservation in situ	Report	2017	Saidi, Seddik	17
Projet FAO-GCP/MOR/044/GFF. Expertise dans le domaine de l'Agriculture Biologique Atelier de formation des enquêteurs sur la conduite d'enquête de la conservation in situ des variétés locales dans les sites du projet.	Report	2017	Saidi, Seddik	46
Projet FAO-GCP/MOR/044/GFF Expertise dans le domaine d'Agronomie et d'agro biodiversité	Report	2018	Saidi, Seddik	44
Expertise dans le domaine d'Agronomie et d'agro biodiversité	Report	2018	Saidi, Seddik	20
Projet FAO-GCP/MOR/044/GFF Expertise dans le domaine d'Agronomie et d'agro biodiversité	Report	2018	Saidi, Seddik	17
Projet FAO-GCP/MOR/044/GFF Expertise dans le domaine d'Agronomie et d'agro biodiversité	Report	2018	Saidi, Seddik	127
Projet FAO-GCP/MOR/044/GFF Conservation in situ de l'agro biodiversité en milieu oasien et régions de montagne	Report	2018	Saidi, Seddik	127
Projet FAO-GCP/MOR/044/GFF Expertise dans le domaine d'Agronomie et d'agro biodiversité	Report	2018	Saidi, Seddik	25
Gestion phytotechnique et Conduite du palmier dattier	Report	2018	Sedra, Moulay Hassan	53
Résumé du Guide de création d'une exploitation de palmiers-dattes. Gestion avant et post récolte (en arabe)	Manual	2018	Sedra, Moulay Hassan	42



<b>Title of the document</b>	<b>Type</b>	<b>Date</b>	<b>Written by: Author</b>	<b>No. pages</b>
Projet GCP/MOR/044/GFF Rapport final de la consultation. Composantes: Nettoyage des touffes de palmier dattier dans les oasis; Gestion phyto-technique et conduite de la culture de palmier et cultures sous-jacentes Sites du projet : Aït Mansour, Akka, Assa et Figuig	Report	2018	Sedra, Moulay Hassan	53
Marché n°: 21/2016 /DRA de l'Oriental. Assistance technique des agriculteurs pour l'élaboration d'un cahier des charges pour la labellisation des dattes de la variété Assiane de Figuig pour le compte de la direction régionale de l'agriculture de l'oriental en lot unique. Rapport de phase 2: appui à l'élaboration du cahier de charges	CPS	2017	Youri Consulting	38

## Appendix 1. GEF evaluation criteria table

FAO - GEF rating criteria	Rating	Comment of the evaluation team
<b>1) Relevance</b>		
Overall relevance of the project	HS	Proven relevance to Morocco's strategies and its relations with FAO and GEF.  The relevance of the project could have been strengthened by a more balanced intervention logic in terms of its objectives and the duration of its implementation.
<b>2) Effectiveness</b>		
Overall assessment of project outcomes	MS	The project carried out the majority of its capacity building activities for conserving and reducing the use of natural resources. However, some activities remain "incomplete" activities (and not insignificant ones): The cooperatives that were previously supported by the project have not reached a basic level of autonomy, the coaching has not been finalised (ONCA, coaching), and the objective of adopting the "Organic" quality approach and strengthening the means of control cannot be considered as fully achieved.
Output 1: Improvement of the regulatory framework	MS	The expected outcome has not been fully achieved. The catalogue of databases (Output 1.1), the implementation of a regulatory framework (Output 1.2), as well as training and networking sessions (Output 1.3), did not support "biodiversity conservation" through the enhancement of local knowledge, the know-how of populations, and biodiversity as a regulated strategy framed by an inter-professional network to help small farmers in Oases gain capacity to adapt to climate change and resilience.
Output 2: Reduced degradation of natural resources	S	The outputs of Component 2 were carried out to improve and rehabilitate cropping systems by applying: good practices in sustainable land and water management targeting the reversal of land degradation trends (Output 2.1); flood control and measures taken against land degradation/ desertification (Output 2.2); and efficient water use and hydro-agricultural development measures based on traditional irrigation systems (Output 2.3). All project outputs are likely to improve land use conditions in oases; they promote and will continue to promote the sustainable use of natural resources after the project's completion.
Output 3: Biodiversity integration into markets	MU	Suffered from the late start of the project. Some activities are still uncompleted; this explains why the rating for this component is just Moderately Unsatisfactory, while the completion of other activities is deemed satisfactory.
<b>3) Efficiency, implementation and execution</b>		
Overall quality of project implementation and adaptive management (implementer)	S	The financial arrangements for mobilising complex technical assistance turned out to be adequate, although weaknesses in communication should be pointed out.
Quality of execution (executing agent)	S	It is worth noting that a better involvement on the part of civil society organisations could have had a positive impact on the project and alleviate some of the communication challenges encountered.
Efficiency (including cost and time efficiency)	MS	Overall, the project suffered from delays in start-up, which was a determining factor in the project's performance.
<b>4) Sustainability</b>		
Overall sustainability	ML	Many activities are still to be completed, but given ANDZOA's remit, all the public parties concerned by oases will be mobilised for sustainable

FAO - GEF rating criteria	Rating	Comment of the evaluation team
<b>1) Relevance</b>		
		local development and, above all, for the maintenance and generalisation of the project's benefits.
<b>5) Factors affecting performance (Monitoring-evaluation and involvement of partners)</b>		
Overall quality of partner involvement	MS	Several partners at the central level did not carry out activities under their own responsibility. Lack of CSO involvement in project design and implementation.
Overall quality of monitoring and evaluation	MU	The project, with its multiple stakeholders at central, regional and local level, was carried out in a very large space, implementing various activities, very often co-financed by the national budget. The activities were carried out according to the specific commitment, implementation, control and payment procedures of each institution, and did not always allow all stakeholders to have all the information at the right time and with the requested quality.
Monitoring-evaluation, design at the beginning of the project	S	there is a lack of synthesis and the monitoring of the project is largely based on the memory of the individuals who worked on it rather than on the monitoring-evaluation system (see Output 4.1).
Monitoring/evaluation, implementation	MU	Despite a continuous exchange of information between the project coordination, the national focal point at INRA and the partners of the five sites, communication on the project leaves, as earlier said, some institutional partners in the dark.

## Appendix 2. Co-financing table

Name of the Co-financer	Co-financer type	Type of co-financing	Co-financing at project start (Amount confirmed at GEF CEO endorsement/approval by the project design team) (in USD)			Materialised Co-financing at project mid-term (in USD)		
			In-kind	Cash	Total	In-kind	Cash	Total
ADA – Green Morocco Plan (GMP), Pillar II	Public	Public		2 000 000	2 000 000		4 617 500	4 617 500
ANDZOA – Improvement of agricultural production in Oases	Public	Public		4 000 000	4 000 000		7 500 000	7 500 000
INRA – Agricultural and Environmental Research Programme	Public	Public		500 000	500 000		60 000	60 000
APDESPS – Southern Oasis Development Programme	Public	Public		1 000 000	1 000 000		0	0
TATA DPA	Public	Public					88 850	88 850
Figuig DPA	Public	Public					737 700	737 700
Tiznit DPA	Public	Public					99 950	99 950
ORMVA TAF	Public	Public					2 400 800	2 400 800
Grand Total (in USD)				7 500 000	7 500 000		15 504 800	15 504 800

## Appendix 3. List of people interviewed

Surname	Name	Title
<b>FAO – Rome</b>		
Owen	Clémence	OED FAO – Rome
Veynet	Maude	FAO - GEF
<b>FAO-Morocco</b>		
Ben Hammou	Ahmed	Monitoring and evaluation manager, FAO Morocco
El Idrissi Amhari	Abdelmajid	National coordinator of Project GCP/MOR/044/GFF
Laiti	Abdelhak	Assistant, FAO-Morocco Representation
Saidi	Seddik	Consultant, FAO-Morocco
<b>Institutions at the central level</b>		
Bachri	Mohammed	Director of Strategy and Partnership at ANDZOA
Bekkaoui	Faouzi	Director of the French National Institute for Agricultural Research
Fail	Hamid	Division for the mobilisation of funds at ADA.
Mousaddek	Rachid	Soil Science Engineer (INRA)
El Rhazi	Ouïam	Executive at the Department of the Environment (ADA)
Rheyati	Nassira	Head of Division of International Cooperation (Secretariat of State for Mines and Sustainable Development, in charge of sustainable development)
<b>Private sector</b>		
El Fartass	Badr	Technical Director at CCPG
<b>Institutions and people surveyed in the region of Errachidia</b>		
Alioui	Abdelghani	Expert, OASIL Project (FAO) in Errachidia
Fanissi	Daoud	ORMVA Tafilalt
Fedeli	Mohamed	Regional Directorate of Environment in Errachidia
Ibn Elbachir	Mustapha	Regional Agricultural Research Centre – Errachidia
Nassi	Haddou	Head of the Agricultural Subdivision in Errich
Slimani	Mohamed	National Agricultural Advisory Board (ONCA) Errachidia
Sossey Alaloui	My Lhassan	Expert, OASIL Project (FAO) in Errachidia

Surname	Name	Title
<b>Imilchil site</b>		
Ait Waba	Halima	Tamount Cooperative in Imilchil
Ouhinad	Ahmed	Cooperative in Imilchil
Ouhmade	Chouaib	Member of the Isly cooperative in Imilchil
Ouktar	Mbarek	Farmer in Imilchil and producer
<b>Tiznit province</b>		
El Meloouki	Moulay Abdelaziz	Provincial Director of Agriculture in Tiznit
Khaldi	El Hassan	Technician at Tiznit DPA
<b>Ait Mansour site</b>		
Arhal	Aicha	President of the Imazalen Ait Bounouh Cooperative (Ait Mansour Site, Tiznit Province)
Boulwird	Fadma	Vice-president of Imazalen Ait Bounouh Cooperative (Tiznit Province)
Elkadiri	Madani	President of the TIWADO cooperative
Ismali	Ahmed	Internal Auditor, Member of the Izouran cooperative (Ait Abdelkader) in Ait Mansour
Mehammdi	Ali	President of Tlwado cooperative (Ait Abdelkader); Ait Mansour site
Saidi	Najma	Member of the Imazalen Ait Bounouh Cooperative
<b>Figuig province</b>		
Derfoufi	Said	Provincial Director of Agriculture in Figuig
<b>Figuig site</b>		
Belkadi	Mustapha	Technical assistant, Figuig DPA
El Jabri	Hamed	President of Figuig cooperative
<b>TATA province</b>		
Razzouki	Yassine	Provincial Director of Agriculture in Tata
<b>Akka site</b>		
Bih	Ali	Farmer and member of the Taskala cooperative in Kasbat Sidi Abdellah Ben M'Barek (Akka)
Hrid	Abdelmomen	Moqadem in Sidi Abdellah Ben M'barek
Ouchou	Hassan	Farmer in Kasbat Sidi Abdellah Ben M'Barek (Akka site)
Oukro	Housseny	Farmer in Kasbat Sidi Abdellah Ben M'Barek (Akka site)

Appendix 3. List of people interviewed

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<b>Surname</b>	<b>Name</b>	<b>Title</b>
Saao	Mokhtar	Farmer and member of the Taskala Agricultural Cooperative (Kasbat Sidi Abdellah Ben M'Barek)
Saao	ALI	Former President of EIG Taskala (Kasbat Sidi Abdellah Ben M'Barek)
Said	Abdemoumen	Moqadem in Kasbat Abdellah Ben M'Barek
<b>Assa province</b>		
<b>Assa site</b>		
El Assouri	Aida	President of date producers' cooperative in Assa

## Appendix 4. Evaluation matrix

Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
Relevance			
<p>QE1: How do the project objectives and activities related to biodiversity conservation and mitigation of land degradation through adaptable management of agricultural heritage systems fit into national, GEF and FAO priorities in Morocco?</p>	<p>JC1.1: The choice of the project field and the five implementation areas of Ait Mansour, Assa, Akka, Imilchil, Amellago and Figuig and the selection of beneficiaries show the priorities expressed by Morocco in its environmental policy and sectoral policy documents as well as GEF and FAO priorities in the country.</p>	<p>Integration of project activities into the priorities of the national environmental policy through the evolution of the regulatory framework and sectoral strategies. Involvement of implementing partners in project design, implementation and management.</p>	<p>The answers to the related evaluation questions will be based mainly on literature review and analysis. The ET will also rely on: the analysis of available data and indicators in the field, interviews with stakeholders and the project team, and the analysis of data collected in the field to answer these questions.</p>



Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
	<p>JC 1.2: Project interventions meet stakeholders' needs and regional and local perceptions of those needs.</p>	<p>Needs and stakeholder analysis in the project design phase.</p> <p>Stakeholder participation in project implementation.</p> <p>Relative size of the Project in relation to the needs identified.</p>	
	<p>JC 1.3: The intervention logic and assumptions are appropriate, flexible and relevant in the current context and given the experience gained since project design.</p>	<p>Consistency of the intervention logic.</p> <p>Adequacy of the operational/institutional set-up of the project.</p> <p>Updating activities to adapt the Project to its changing context.</p>	

Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
Efficiency			
<p>QE2: To what extent have the set objectives and outcomes, the planned activities been achieved and carried out?</p>	<p>JC 2.1: The timely outcomes achieved have improved the environment for agro-biodiversity conservation, contributed to reducing pressures on natural resources, promoted biodiversity integration and the sustainable use in local community strategies.</p>	<p>Review of achievements per component and outcome.</p>	<p>The answers to the related evaluation questions will be based mainly on: the project's literature review and analysis, field visits, analysis of data collected in the field, and interviews conducted by the ET with stakeholders and the project team. The answers to the questions may be supported by the analysis of data and indicators available in the field.</p>

Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
	<p>JC 2.2: The interventions contributed to the strengthening of the technical, managerial and organisational capacities of the stakeholders.</p>	<p>Activities related to capacity building.</p> <p>Opinion of trainees about new knowledge and skills acquired and methods applied.</p> <p>Agricultural practices implemented by the beneficiaries</p> <p>Training evaluation documents produced in a participatory manner with the beneficiaries.</p>	
	<p>JC 2.3: Outcomes have been achieved at the level of the cross-cutting dimensions (gender, gender equality and civil society involvement) and the monitoring-evaluation system.</p>	<p>Indicators according to which the Programme has an influence (positive or negative) on gender relations at the level of the target groups.</p> <p>Indicators relating to other aspects.</p>	

Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
Efficiency			
QE3: To what extent are the desired effects achieved with the least possible resources (funds, expertise, time, administrative costs)?	JC 3.1: During the design phase of the project, a correct relationship was drawn between the general objective, the outcomes and the means.	Realistic choice of strategies and means Realistic estimates of external budgets and human resources.	The answers to the related evaluation questions will be based mainly on: literature review and analysis, and interviews conducted during the evaluation by the ET with stakeholders and the project team.
	JC 3.2: Resources were put in place in quantity, quality and on time to achieve planned objectives.	Establishment of human resources and structures according to programming, those of FAO and the State.	

Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
	<p>JC 3.3: There is a correct relationship between the results obtained and the means implemented.</p>	<p>Degree of achievement of outcomes with the resources put in place.</p> <p>Achievement of unintended outcomes.</p> <p>Consideration of value for money.</p> <p>Acceptable ratio between activity costs and number of beneficiaries for this type of project.</p> <p>Actual use of estimated budget and allocation based on planning (commitment rate).</p>	
	<p>JC 3.4: The organisational modalities of the intervention have a positive influence on the achievement of objectives.</p>	<p>Clear and applicable institutional (organisational) structures in the context of the project.</p> <p>The quality of programme management is satisfactory</p> <p>Flexible and effective financial management.</p>	

Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
Sustainability			
<p>EQ 4: To what extent will the benefits resulting from the project continue after its closure resisting risks in the long term?</p>	<p>JC 5.1: Institutional Sustainability; Within the Departments of Agriculture, functional and sustainable arrangements have been established in the areas of biodiversity conservation and mitigation of land degradation through adaptable management of agricultural heritage systems for the extension and monitoring of project activities.</p>	<p>Integration of biodiversity conservation management into structures and processes (role of administration and civil society).</p> <p>Absorption capacity of central and regional structures for the Project's outputs and their institutional consequences Appropriate distribution of tasks and roles among stakeholders.</p> <p>Availability of an exit strategy from the Project.</p>	<p>The answers to the related evaluation questions will be based on: literature review and analysis, field visits, analysis of data collected in the field, and interviews conducted by the ET with stakeholders and the project team.</p>

Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
	<p>JC 5.2: Financial sustainability: The financial viability of the achievements, services and structures carried out by the Project is guaranteed.</p>	<p>Funds available for sustainable access to the fallouts of outputs (Coverage of operating, maintenance and investment costs).</p>	
	<p>JC 5.3: Political sustainability: There is political support for the Project's theme and approach.</p>	<p>Correspondence at the level of local, national and regional policy plans; in particular, the GMP. Correspondence to the international donors' agenda.</p>	
	<p>JC 5.4: Technical sustainability: Achievements are in line with the technical capacities of supervision and maintenance services and that of the managers of institutions, beneficiaries.</p>	<p>Activities related to capacity building techniques Monitoring and evaluation guide. Functioning of observation, monitoring and warning systems (statistics, analytical laboratories, measuring equipment, etc.).</p>	

Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
Impact on implementation and partnerships			
QE5: What significant changes has the project made at its closure and what steps have been taken to progress towards long-term impacts?	JC 4.1: Individuals are trained and procedure manuals are developed in the different areas of the project.	Discussion and interview with trained individuals.	The answers to the related evaluation questions will be based on: literature review and analysis, field visits, analysis of data collected in the field, and interviews conducted by the ET with stakeholders and the project team.
	JC 4.2: New mechanisms are functional in the areas of planning, monitoring/evaluation and management for biodiversity conservation.	Review of the production and publications of the systems put in place.	



Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
	<p>JC 4.3: A new synergy between the different stakeholders at central, regional and local levels (INRA, ADA, ANDZOA, ONC, DPDF, HCEFLCD, AUEAs, CSOs, etc.) is created around biodiversity conservation led by the Ministry of Agriculture.</p>	<p>Interdepartmental structures, existence, modalities and level of operation, results.</p>	
Cross-cutting dimension			
<p>QE6: To what extent are gender issues (broadly defined) and CSO involvement taken into account in project design and implementation?</p>	<p>JC 6.1: Involvement of civil society organisations from the design, implementation and definition of its role after project closure.</p> <hr/> <p>JC 6.2: Gender aspects are adequately addressed at the design stage according to the modalities and approaches provided for in GEF/FAO projects.</p>	<p>Availability of joint strategy papers.</p> <hr/> <p>Mechanisms for monitoring gender aspects defined at the project design stage have been established.</p> <p>A gender analysis of project implementation have been carried out.</p>	<p>The answers to the related evaluation questions will be based on: literature review and analysis, field visits, analysis of data collected in the field, and interviews conducted by the ET with stakeholders, the project team and, to the extent possible, beneficiaries.</p>

Evaluation Questions, EQ	Judgment criteria	Indicators	Information sources
	JC 6.3: Taking into account the "leave no one behind" principle throughout the life of the project.	Available planning and implementation document for the "leave no one behind" principle.	

## **Appendix 5. Consultations scheduled at the SC II meeting**

### **Ait Mansour site:**

- i. Study to better understand the water potential of the valley and to make concerted and appropriate proposals for a better valorisation of this resource, taking into account the social, legal, environmental and landscape dimensions.
- ii. Landscape study of the valley and proposal of a development vision to develop agro-tourism while preserving the site.
- iii. Characterisation and description study of the palm grove and its phoenicultural diversity in a vision of development of economic varieties such as Mejhoul, Feggous, Barhi, Zaghloul ...
- iv. Technical assistance to (men and women) breeders to improve goat productivity and add value to local goat products.
- v. Support to women collecting aromatic and medicinal plants (AMP) around the site through: the dissemination of techniques for the preservation of the plant heritage; the improvement of local know-how in drying, conservation, presentation for marketing, and organisation to compete the market.
- vi. Technical assistance to preserve and improve drying and conservation techniques for local agricultural products, in order to better add value and market such products according to the standards required by the market.

### **Akka site:**

- i. Study of the irrigation network inside the palm grove.
- ii. Mapping of the palm grove soils and situational analysis.
- iii. Inventory of palm trees and varietal characterisation of date palms.
- iv. Support to two cooperatives, one of which is a women's cooperative, dealing with the conditioning and valorisation of dates. Financial support for the acquisition of some starting materials.
- v. Acquisition of small equipment to measure soil characteristics (salinity, conductivity, pH...)

### **Figuig site:**

- i. Study the elaboration of a reference situation of the Figuig palm grove in terms of the number of palm trees, the geolocation of the perimeters, and the situation of the irrigation network.
- ii. Rehabilitate seguias in the Figuig palm grove over a length of 1,700 ml.
- iii. Organise a visit for companies in charge of dam water management and the recovery of the sums due by the beneficiaries. Such a visit could take place within Doukkala.
- iv. Introduce D'man breeding at the level of women's cooperatives through the acquisition of ewes, some bloodstock and small breeding materials. The DPA will determine the beneficiaries of this operation and ensure their supervision.
- v. Contribute to the construction of a workshop for the benefit of the women's cooperative: Professional cooperative Solidarity production and marketing of local products in Figuig.

### **Imilchil - Amellago site:**

- i. Study the setting up of a unit for the valorisation and production of Beldi chickens and eggs.
- ii. Contribute to the creation of a nursery for the multiplication and reforestation by indigenous species of the eroded ravines in the valley of Imilchil.
- iii. Rehabilitate and develop gallery, irrigation network and khattara water storage basin.

## Appendix 6. Project results chains (Results, indicators, activities 6a, per site 6b, and details of activities 6c)

### 6a. Matrix of MOR 044 outcomes, indicators & activities (elaborated by the evaluation team)

Component / Outcome / Output	Indicators	Achievement rate %	Comments
<b>Component 1: Create an enabling environment to maintain the flow of agro-ecological system services in oasis systems, thereby ensuring the livelihoods of local people</b>			
<b>Outcome 1</b> An enabling environment has been consolidated to support agro-biodiversity conservation, by targeting regulatory frameworks, building institutional capacity, and collecting and storing data	<ul style="list-style-type: none"> <li>- The regulatory framework for seeds is officially adopted by the government [LD PMAT LD1. i)].</li> <li>- At least 500 qx of local seed varieties are identified, classified and geo-referenced in local seed catalogues.</li> </ul>		
<b>Output 1.1</b> Development of databases and catalogues on local seed varieties, including plant genetic resources and pollinators	<ul style="list-style-type: none"> <li>- <b>Local varieties and cultivars of vegetable, fodder, cereal and date palm crops</b> are catalogued in the five pilot sites</li> <li>- Seed producers are identified.</li> <li>- <b>A tool</b> to trace and monitor seed exchange and seed flow has been designed in targeted oasis systems</li> <li>- Strategies for integrating biodiversity conservation into agricultural production are discussed.</li> </ul>	<ul style="list-style-type: none"> <li>- 100% <b>(70%)</b></li> </ul>	<ul style="list-style-type: none"> <li>- 44 accessions have fed the INRA database.</li> <li>- The only tool for tracking producers has been developed by the CPGG firm but not used by the project.</li> <li>- Strategies that integrate biodiversity have not been concretely implemented by producers. Gaps were observed:               <ul style="list-style-type: none"> <li>o In Ait Mansour, at the Wahat Mansous youth cooperative                   <ul style="list-style-type: none"> <li>▪ Use of non-certified seeds (Potatoes) on 700 m2</li> <li>▪ Cumin was not sown according to the calendar (sown late)</li> </ul> </li> <li>o At the Teskala EIG (no control of washing practices upstream of the seguia)</li> <li>o Lack of regional coordination within the framework of the RPMCs, as the governing body and fundamental link in</li> </ul> </li> </ul>

			<p>the strategy for each site.</p> <ul style="list-style-type: none"> <li>○ There was a misunderstanding of GIAHS' philosophy, which certainly constitutes an appropriate framework for action for the project. However, the project cannot be reduced to this.</li> </ul>
<p><b>Output 1.2</b> A regulatory framework for the development of local seed varieties has been set up and the seed sector is strengthened.</p>	<p>- <b>A regulatory framework</b> for seeds is officially adopted by the government</p>	<p>- 100% <b>(50%)</b></p>	<p>Workshops were held but some were unsuccessful due to:</p> <ul style="list-style-type: none"> <li>○ The resistance of the faint-hearted seed-grower lobbies.</li> <li>○ The inefficiency of the legislation related to the biodiversity sector.</li> <li>○ A distant positioning of approval structures at the level of the DPFP.</li> </ul>
<p><b>Output 1.3</b> Seed producers' cooperatives and networks of seed producers have been established.</p>	<p>- <b>5 seed producers' cooperatives and 5 seed producers' networks</b> (50% of which are women) are trained, (one cooperative and one network for each pilot site)</p>	<p>- 100% <b>(75%)</b></p>	<ul style="list-style-type: none"> <li>- The network of multipliers and 52 producers (<b>out of 75 planned</b>) is distributed as follows: 15 multipliers and one distributor in Akka; seven multipliers and one distributor in Assa; 10 multipliers and two distributors in Figuig; seven multipliers and one distributor in Ait Mansour; 13 multipliers and three distributors in Imilchil-Amellago.</li> <li>- Networks lacking formalisation, externality mechanisms (economic, political and technical), provided for in the ProDoc, to make it a vector of lobbying, advocacy and to make progress on the Regulatory Framework. However, these functions were not taken up by the mission. The members of the network who were interviewed are not aware of them.</li> <li>- The Tamount women's cooperative in Imilchil is threatened following its eviction from its premises and might disappear.</li> </ul>
<p><b>Component 2: Mitigate pressures on natural resources due to competing land use in order to reverse the trend of land degradation in oasis landscapes, by applying good agricultural and agro-ecological practices.</b></p>			

<p><b>Outcome 2.1</b> Agricultural production is increased and helps to mitigate land degradation in oasis systems</p>	<ul style="list-style-type: none"> <li>- <b>640ha of certified land</b></li> </ul>		
<p><b>Output 2.1</b> Sustainable land and water management practices targeting the reversal of land degradation trends, implemented in five selected pilot sites in the oasis system.</p>	<ul style="list-style-type: none"> <li>- <b>500 farmers are trained in sustainable land and water management practices</b></li> <li>- <b>25% of agricultural land is involved in diversified and integrated agricultural production</b></li> </ul>	<ul style="list-style-type: none"> <li>- 100% <b>(75%)</b></li> </ul>	<ul style="list-style-type: none"> <li>- Local knowledge and know-how, considered ingenious, are part of local practices (e.g. social water management, integrated techniques, and characteristics of oasis systems). According to the trainer, this knowledge and know-how needs to be systematised and disseminated. It is regrettable that there has not been an inventory of this knowledge "without its fossilisation" according to the Prodoc</li> <li>- It should be noted that the participatory seed breeding planned is not effective because farmers did not consider "in Situ" breeding during several campaigns involving farmers in a participatory process.</li> </ul>
<p><b>Output 2.2</b> Farmers are trained in flood control techniques and measures against land degradation/desertification in the five pilot sites</p>	<ul style="list-style-type: none"> <li>- <b>200ha of agricultural area protected against floods</b></li> <li>- <b>50 ha in Imilchil-Amellago.</b> Rehabilitation of ravines and plantations on the banks of the river</li> </ul>	<ul style="list-style-type: none"> <li>- 100%</li> </ul>	<ul style="list-style-type: none"> <li>- Taking into account the DPA's work; this rate can go beyond 100%</li> </ul>
<p><b>Output 2.3</b> Local producers are trained on efficient water conservation and use practices as well as hydro-agricultural development measures based on traditional irrigation systems</p>	<ul style="list-style-type: none"> <li>- Traditional irrigation systems are repaired and local people are involved in maintenance activities</li> <li>- Traditional water diversion structures are being rehabilitated in Imilchil and the local community is involved in maintenance activities.</li> <li>- Legal capacities are strengthened in terms of irrigation water use and hydro-agricultural adjustment in Imilchil.</li> <li>- A drip irrigation system is set up in Imilchil</li> </ul>	<ul style="list-style-type: none"> <li>- 100%</li> <li>- 100%</li> <li>- 100%</li> <li>- 100%</li> </ul>	

Component 3: Integrate biodiversity conservation and sustainable use into the local strategies for economic diversification in the oasis landscapes.			
<p><b>Outcome 3.1</b> Local capacity has been strengthened for the implementation of available labelled local products from local Oases in the five pilot sites.</p>	<ul style="list-style-type: none"> <li>- <b>640ha</b> in the oasis ecosystem are in the process of certification/labelling</li> <li>- <b>5 specifications</b> to apply for the labelling of local products, have been submitted (dates, cereals, apples, wool).</li> <li>- <b>At least 500 qx of local seed varieties</b> have been saved, involving <b>75 farmers</b>.</li> </ul>	<p>- 100% <b>(57%)</b></p>	<p>The overall area has not been reached. There are several reasons for this:</p> <ul style="list-style-type: none"> <li>o land availability at the oasis level but abandoned due to migration to Ait Mansour</li> <li>o land blockage due to the distribution of estates in Figuig, following the non-recognition of land by absentee owners blocking the consideration of large perimeters grouping homogeneous plots.</li> </ul>
<p><b>Output 3.1</b> Local capacity has been strengthened for the implementation of local products from existing labelled Oases in the five pilot sites. Labelling criteria are to be included in sustainable production standards for biodiversity conservation</p>	<ul style="list-style-type: none"> <li>- <b>Three EIGs involved in sustainable harvesting and the labelling</b> of local date varieties are trained in Akka and Figuig as well as one EIG involved in honey production in Akka. (50% women)</li> <li>- <b>Three cooperatives have been trained on the implementation of labelling specification contracts</b> (GI specifications) for labelled products.</li> <li>- <b>100 producers (50% women) of dates and 50 local farmers</b> have been trained on the management of labelling specification contracts (specifications). (50% women)</li> </ul>	<p>- 100%</p> <p>-100%</p> <p>-100%</p>	<p>-</p>
<p><b>Output 3.2</b> Applications are submitted to the competent authorities for: the labelling of oasis local products; distinctive signs of origin and quality for food and agricultural products (cereals, apples in Imilchil, Assiane dates in Figuig and wool in Imilchil and Figuig).</p>	<ul style="list-style-type: none"> <li>- <b>5 specifications have been submitted for the labelling of local products</b> including dates, crops, apples, and wool:</li> <li>- GI label for Imilchil local crops;</li> <li>- GI label for Assiane dates from Figuig;</li> <li>- AL label for Imilchil apples;</li> <li>- AL label for Imilchil wool;</li> <li>- AL label for Figuig wool;</li> </ul>	<p>- 100% <b>(60%)</b></p>	<p>- Two AL for uncompleted wool</p>
<p><b>Output 3.3</b> Agricultural products from local crop varieties are labelled organic</p>	<ul style="list-style-type: none"> <li>- <b>Organic certification of 640ha</b> (including 140ha in Ait Mansour, 40ha in Assa, 80ha in Akka, 100ha in Figuig and 280ha in Imilchil).</li> </ul>	<p>- 89% <b>(57 %)</b></p>	<p>- out of the 1,117ha originally planned)</p>

<p><b>Outcome 3.4</b> The promotion of agro-food products, such as dates and durum, is strengthened</p>	<ul style="list-style-type: none"> <li>- <b>100% of the agricultural product of Imilchil women's cooperative is processed and promoted</b></li> <li>- <b>50% of the agricultural production of date producers is promoted and processed</b> (i.e. production of date paste and syrup).</li> </ul>	<ul style="list-style-type: none"> <li>- 100% <b>(50%)</b></li> <li>- 0%</li> </ul>	<ul style="list-style-type: none"> <li>- Cooperative evicted from its premises. It is operating at a slow pace (50% of its capacity) and is faced with real constraints. This led to the resignation of the president and the weakening of the structure.</li> <li>- According to the PIR, a market was launched but there was no buyer.</li> </ul>
<p><b>Output 3.5</b> Produce a benchmarking of labelled agro-biodiversity products</p>	<ul style="list-style-type: none"> <li>- <b>Benchmarking for each labelled product is developed</b></li> <li>- <b>A sales contract is drawn up for each labelled product.</b></li> </ul>	<ul style="list-style-type: none"> <li>- 40%</li> <li>- 0%</li> </ul>	<ul style="list-style-type: none"> <li>- Apart from market identification actions by the CCPG, no comparative analysis of product markets was carried out by the project.</li> </ul>
<p><b>Output 3.6</b> Local producers are trained on seed saving techniques and participatory plant breeding through demonstration plots</p>	<ul style="list-style-type: none"> <li>- <b>At least 500 qx of local seed varieties have been saved, involving 75 local farmers.</b></li> <li>- <b>75 local producers in each project site are familiarised with local seed saving and participatory plant breeding techniques.</b> (50% women)</li> <li>- <b>2 demonstration plots</b> implement participatory plant breeding (Imilchil and Akka).</li> <li>- <b>4 sessions of seed breeding</b> and preparation were organised.</li> </ul>	<ul style="list-style-type: none"> <li>- 100%</li> <li>- 100%</li> <li>- 100%</li> <li>- 100%</li> </ul>	<ul style="list-style-type: none"> <li>- Same as (Output 2.1)</li> </ul>
<b>Component 4: Monitoring and evaluation</b>			
<p><b>Outcome 4.1</b> The project is implemented following a results-based management</p>	Project outcomes are achieved and show sustainability		
<p><b>Output 4.1</b> The systematic field data collection system to monitor project performance indicators is operational</p>	Project outcomes are achieved and show sustainability	- 75%	<ul style="list-style-type: none"> <li>- It was not possible to have follow-up reports, other than the PIRs. In terms of "Results Chain", (i) the project does not have an explicit ToC. Thus, the results chain can only be assessed considering the heterogeneity of the actions (77) and Outputs (15) and the multi-institutional nature of the project. (ii) <i>The risks identified by the ET are numerous (migration; lack of certification,</i></li> </ul>



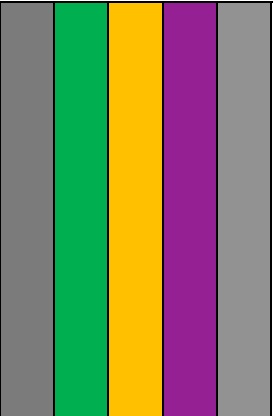
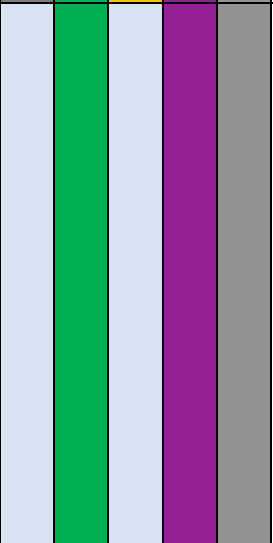
			<i>misuse of inputs, climatic risk, locust invasion, market fluctuations, increased dependence on a single BIO provider or in the cooperatives and EIGs of a single leader; etc.) and are not taken into account. (iii) Performance indicators do not have targets within the framework of the contribution actions of other partner institutions. (iv) Sources and reliability of data and reports: the mission was unable to disentangle the physical actions carried out within the framework of the project.</i>
<b>Output 4.2</b> Final evaluation completed	<b>Evaluation completed</b>	- 100%	
<b>Output 4.3</b> Dissemination of Information		- 80 % <b>(80%)</b>	<p>- Many actions have been undertaken: study trip; participation in various events disseminating the achievements of the project (SIAM, SIMADATTES, Seminar on sustainable mountain development in early October 2018, the Maghreb workshop on the development of oases in November 2018, World Biodiversity Day, BioExpo exhibition); production and dissemination of training materials on participatory plant breeding and in situ conservation of species in the five sites; guides on local seed production, soil conservation and date palm management have been developed; registration and recognition of the argan grove in Ait Souab-Ait Mansour as GIAHS.</p> <p>- However, the upscaling of the "dynamic development model" as planned by the ProDoc with stakeholders has not been achieved: only the Tiznit DPA has the project documentation, ANOC is not in a position to appropriate and disseminate the project's actions. RPMCs, whose role of coordinating the various stakeholders is crucial in disseminating information, were not functional.</p>

### 6b. Matrix of MOR 044 outcomes, indicators & activities per site (elaborated by the evaluation team)

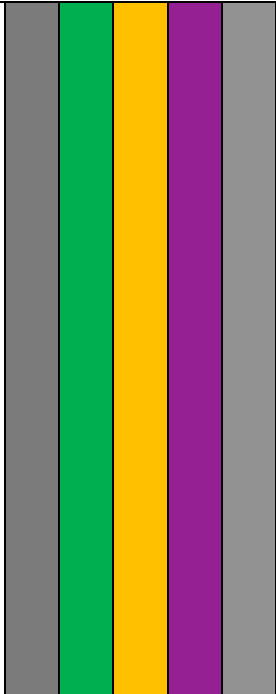
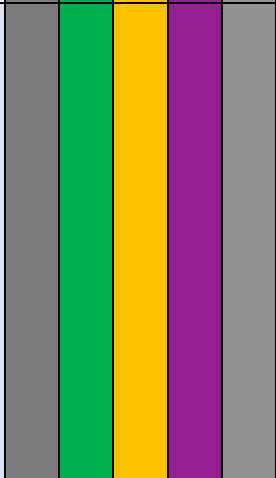
Component / Outcome / Output	Indicators	Planned activities	Ait Mansour	Akka	Assa	Imilchil	Figuing	
<b>Component 1: Create an enabling environment to maintain the flow of agro-ecological system services in oasis systems, thereby ensuring the livelihoods of local people</b>								
<b>Outcome 1</b> <b>An enabling environment has been consolidated to support agro-biodiversity conservation, by targeting regulatory frameworks, building institutional capacity, and collecting and storing data</b>	<ul style="list-style-type: none"> <li>- The regulatory framework for seeds is officially adopted by the government [LD PMAT LD1. i)].</li> <li>- At least 500 qx of local seed varieties are identified, classified and geo-referenced in local seed catalogues.</li> </ul>	-	-	-	-	-	-	
<b>Output 1.1</b> Development of databases and catalogues on local seed varieties, including	<ul style="list-style-type: none"> <li>- <b>Local varieties and cultivars of vegetable, fodder, cereal and date palm crops are catalogued in the five pilot sites</b></li> <li>- Seed producers are identified.</li> <li>- <b>A tool</b> to trace and monitor seed exchange and seed flow</li> </ul>	<ul style="list-style-type: none"> <li>• Development of questionnaires and field surveys to collect existing information on local seed varieties and plant genetic resources;</li> <li>• Seeds and seedlings from local varieties have been identified and mapping work to locate seed producers has been carried out in the five pilot sites;</li> </ul>						Thanks to the project: <ul style="list-style-type: none"> <li>- 144 genetic accessions were inventoried;</li> <li>- Large-scale surveys have been carried out (189 survey forms of 45 pages each and the mobilisation of 11</li> </ul>

<p>plant genetic resources and pollinators</p>	<p>has been designed in targeted oasis systems</p> <ul style="list-style-type: none"> <li>- Strategies for integrating biodiversity conservation into agricultural production are discussed.</li> </ul>	<ul style="list-style-type: none"> <li>• Locating and monitoring seed exchange and seed flow in targeted oasis systems;</li> <li>• Multi-stakeholder workshops involving seed producers, extension agents, relevant local authorities, and partner institutions to discuss the results and evaluate outreach strategies for neighbouring communities;</li> <li>• Development of practical guides/catalogues on local seeds and seedlings varieties, and on seed selection and storage techniques for biodiversity conservation. These guides and catalogues should be distributed among cooperatives and seed producer networks.</li> </ul>		<p>investigators), analysed and synthesised</p> <ul style="list-style-type: none"> <li>- The mapping of seed growers that resulted in a list of seed producers in the sites</li> </ul>
<p><b>Output 1.2</b> A regulatory framework for the development of local seed varieties has been set up and the seed sector is strengthened.</p>	<ul style="list-style-type: none"> <li>- <b>A regulatory framework</b> for seeds is officially adopted by the government</li> </ul>	<ul style="list-style-type: none"> <li>• Multi-stakeholder workshops (at least 2) to develop the draft regulatory framework for local seed varieties with seed producers (men and women), local authorities and government officials.</li> <li>• Workshops to adopt and validate the regulatory framework with key stakeholders.</li> </ul>		<ul style="list-style-type: none"> <li>- Inclusion of two sites (Imilchil-Amellago and Ait Mansour) in the list of Globally important agricultural heritage systems (GIAHS).</li> <li>- Preparation of a regulation for local seeds</li> </ul>
<p><b>Output 1.3</b> Seed producers' cooperatives and networks of seed producers have been established.</p>	<ul style="list-style-type: none"> <li>- <b>5 seed producers' cooperatives and 5 seed producers' networks</b> (50% of which are women) have been trained, (one cooperative and one network for each pilot site)</li> </ul>	<ul style="list-style-type: none"> <li>• Development of training materials on participatory breeding and in situ conservation in the five pilot sites.</li> <li>• Five seed producers' cooperatives (50% women) will be established, one in each of the five pilot sites.</li> <li>• Five networks of seed producers (50% women) will be established, one in each of the five pilot sites), to promote and</li> </ul>		<ul style="list-style-type: none"> <li>- Identification of 52 producers including 15 multipliers and one distributor in Akka; seven multipliers and one distributor in Assa; 10 multipliers and two distributors in Figuig; seven multipliers and one distributor in Ait Mansour; 13 multipliers</li> </ul>

		organise the preservation and distribution of open-pollinated seeds.						and three distributors in Imilchil-Amellago.
<b>Component 2: Mitigate pressures on natural resources due to competing land use in order to reverse the trend of land degradation in oasis landscapes, by applying good agricultural and agro-ecological practices.</b>								
<b>Outcome 2.1</b> <b>Agricultural production is increased and helps to mitigate land degradation in oasis systems</b>	<b>640ha of certified land</b>							
<b>Output 2.1.1</b> Sustainable land and water management practices targeting the reversal of land degradation trends, implemented in five selected pilot sites in the oasis system.	<b>500 farmers have been trained</b> in sustainable land and water management practices <b>25% of agricultural land is involved in diversified and integrated agricultural production</b>	<ul style="list-style-type: none"> <li>• Support to local agents in pruning, cleaning palm groves to avoid fire risks and leave space for production, pollination in order to obtain high quality dates in Ait Mansour, Assa, Figuig and Akka;</li> <li>• Support to farmers to better understand the benefits of leguminous crop rotation such as lentils, chickpeas, peas and beans;</li> <li>• Training of farmers on the use of organic fertilisers (date palm waste compost, manure) and on crop pollination and management;</li> <li>• Installation and maintenance of drip irrigation systems in three palm orchards in Ait Mansour, Assa and Figuig;</li> <li>• Training of farmers on date palm and crop management techniques, including pollination in Ait Mansour, Assa and Figuig;</li> </ul>						- Training of 384 men and women farmers (23% on average with a low female participation rate in Assa) and 21 managers and technicians representing local stakeholders in the five project sites.

		<ul style="list-style-type: none"> <li>• Training on the integrated management of livestock and crop production, including fencing livestock to impede them from accessing river banks, thus improving water quality in river grazing corridors;</li> <li>• Training of farmers on good practices to manage and produce date palms in Figuig and Ait Mansour;</li> <li>• Direct seeding (zero-tillage) of small cereals using animal traction in two demonstration plots (0.25 ha each), one in Imilchil and the other in Amellago.</li> </ul>		
<p><b>Output 2.1.2</b> Farmers are trained in flood control techniques and measures against land degradation/desertification in the five pilot sites</p>	<p><b>200ha of agricultural area protected against floods 50 ha in Imilchil-Amellago.</b> Rehabilitation of ravines and plantations on the banks of the river</p>	<ul style="list-style-type: none"> <li>• Rehabilitation and construction of gabion protection baskets and flood mitigation based on in-depth hydrological studies in Akka, Figuig and Imilchil-Amellago</li> <li>• Remediation of ravines through reforestation in Imilchil-Amellago and training in ravine vegetation techniques for flow control and ravine rehabilitation (correction) in Imilchil;</li> <li>• Planting of poplars for bank control in Imilchil</li> <li>• Training of agents on the "Palmivelle system" for sandy area revegetation in Akka and Figuig and coaching on preventive measures against salinity formation</li> </ul>		<p>Not achieved</p>

<p><b>Output 2.1.3</b> Local producers are trained on efficient water conservation and use practices as well as hydro-agricultural development measures based on traditional irrigation systems</p>	<p>Traditional irrigation systems are repaired and local people are involved in maintenance activities Traditional water diversion structures are being rehabilitated in Imilchil and the local community is involved in maintenance activities. Legal capacities are strengthened in terms of irrigation water use and hydro-agricultural adjustment in Imilchil. A drip irrigation system is set up in Imilchil</p>	<ul style="list-style-type: none"> <li>• Training on the rehabilitation and management of khetaras and seguias in Imilchil- Amellago, Figuig, Ait Mansour, Assa;</li> <li>• Rehabilitation of water diversion structures in Imilchil;</li> <li>• Training on economic use of irrigation water and hydro-agricultural adjustments in Imilchil.</li> </ul>						<p>- A training to address the issues of collection, storage and management of irrigation water in an environment characterised by chronic water stress</p>
<p><b>Component 3: Integrate biodiversity conservation and sustainable use into the local strategies for economic diversification in the oasis landscapes.</b></p>								
<p><b>Outcome 3.1</b> Local capacity has been strengthened for the implementation of available labelled local products from local Oases in the five pilot sites.</p>	<ul style="list-style-type: none"> <li>- <b>640ha</b> in the oasis ecosystem are in the process of certification/labelling</li> <li>- <b>5 specifications to apply for the labelling of local products, have been submitted (dates, cereals, apples, wool).</b></li> <li>- <b>At least 500 qx of local seed varieties</b> have been saved, involving <b>75 farmers.</b></li> </ul>	<p>-</p>	-	-	-	-	-	-

<p><b>Output 3.1.1</b> Local capacity has been strengthened for the implementation of local products from existing labelled Oases in the five pilot sites. Labelling criteria are to be included in sustainable production standards for biodiversity conservation</p>	<ul style="list-style-type: none"> <li>- <b>Three EIGs involved in sustainable harvesting and the labelling</b> of local date varieties are trained in Akka and Figuig as well as one EIG involved in honey production in Akka. (50% women)</li> <li>- <b>Three cooperatives have been trained on the implementation of labelling specification contracts</b> (GI specifications) for labelled products.</li> <li>- <b>100 producers (50% women) of dates and 50 local farmers have been trained on the management of labelling specification contracts (specifications).</b> (50% women)</li> </ul>	<ul style="list-style-type: none"> <li>• Training of local producers in the creation of cooperatives and the setting up of "economic interest groups" (EIGs) involving the public and private sectors;</li> <li>• Creation of four cooperatives and three economic interest groups (EIGs);</li> <li>• Training of local stakeholders on the implementation of traceability systems for labelled products and the management of supply chain documentation;</li> <li>• Training on the use of the label, packaging, and marketing strategies.</li> </ul>		<ul style="list-style-type: none"> <li>- Identification of cooperatives and EIGs benefiting from the project.</li> <li>- Selection of cooperatives by the project that are financially and humanly vulnerable, often based on a single individual.</li> </ul>
<p><b>Output 3.1.2</b> Applications are submitted to the competent authorities for: the labelling of oasis local products; distinctive signs of origin and quality for food and agricultural products</p>	<ul style="list-style-type: none"> <li>- <b>5 specifications have been submitted for the labelling of local products</b> including dates, crops, apples, and wool:</li> <li>- GI label for Imilchil local crops;</li> <li>- GI label for Assiane dates from Figuig;</li> <li>- AL label for Imilchil apples;</li> <li>- AL label for Imilchil wool;</li> <li>- AL label for Figuig wool;</li> </ul>	<ul style="list-style-type: none"> <li>• Development of a GI label for Assiane dates from Figuig (preparation of labelling requirements and submission of Government endorsement request letters);</li> <li>• Development of a GI label for Imilchil cereals;</li> <li>• Development of an Agricultural Label (AL) for Imilchil cereals;</li> <li>• Development of a GI label for Imilchil apples;</li> <li>• Development of a GI label for Imilchil wool;</li> </ul>		<ul style="list-style-type: none"> <li>- The project supported producers to label and certify three agricultural products chosen for their typicality and specificity.</li> <li>- The organic certification of 390 ha out of the 640 ha planned was achieved in Imilchil and Ait Mansour</li> </ul>

<p>(cereals, apples in Imilchil, Assiane dates in Figuig and wool in Imilchil and Figuig).</p>		<ul style="list-style-type: none"> <li>• Development of a GI label for Figuig wool;</li> <li>• Training of local producers (50% women) on GIs, the conditions and standards for a label, and sustainable production practices;</li> <li>• Assistance to 100 date producers, 50 cereal producers and 50 apple producers (50% women) to set up a monitoring and control system;</li> <li>• Support to 3 EIGs in the packaging of local products and the use of the PGI logo and the agricultural label.</li> </ul>					
<p><b>Output 3.1.3.</b> Agricultural products from local crop varieties are labelled organic</p>	<p>- <b>Organic certification of 640ha</b> (including 140ha in Ait Mansour, 40ha in Assa, 80ha in Akka, 100ha in Figuig and 280ha in Imilchil).</p>	<ul style="list-style-type: none"> <li>• Organic certification of 640ha including 140ha in Ait Mansour, 40ha in Assa, 80ha in Akka, 100ha in Figuig and 280ha in Imilchil;</li> <li>• 100 date producers, 50 apple producers, 50 organic cereal producers and 100 organic wool producers (50% women) will receive training on organic farming techniques, labelling requirements and the use of the label;</li> <li>• Exchange/study visits for a group of 60 participants (50% women) will be organised to organic farms in the Agadir and Al Jadida regions.</li> <li>• Training of 100 date producers, 50 cereal producers, 50 apple producers and 100 wool producers (50% women) on the implementation of a traceability system for organic agricultural products.</li> </ul>					<ul style="list-style-type: none"> <li>- Implementation of traceability systems for labelled organic products</li> <li>- The appointment of 16 internal controllers attached to cooperatives or EIGs, including 5 in Akka, 3 in Assa; 2 in Figuig (date EIG); 3 in Ait Mansour; and 3 in Imilchil-Amellago</li> </ul>
<p><b>Outcome 3.1.4</b> The promotion of agro-food</p>	<ul style="list-style-type: none"> <li>- <b>100% of the agricultural product of Imilchil women's cooperative is processed and promoted</b></li> <li>- <b>50% of the agricultural</b></li> </ul>	<ul style="list-style-type: none"> <li>• Training of a women's cooperative in Imilchil on value-added techniques to improve food products (couscous and pasta).</li> </ul>					



products, such as dates and durum, is strengthened	<b>production of date producers is promoted and processed (i.e. production of date paste and syrup).</b>	<ul style="list-style-type: none"> <li>• Training of 20 local producers on date processing and production (syrup and paste production)</li> </ul>						
<b>Output 3.1.5</b> Produce a benchmarking of labelled agro-biodiversity products	<ul style="list-style-type: none"> <li>- Benchmarking for each labelled product is developed</li> <li>- A sales contract is drawn up for each labelled product.</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmarking exercises to assess market opportunities for each labelled product;</li> <li>• On the basis of the benchmarking, local producers will receive training to develop action plans that will improve the competitiveness of agro-biodiversity products;</li> <li>• Training of local producers on drawing up sales contracts.</li> </ul>						Achieved Not achieved
<b>Output 3.1.6</b> Local producers are trained on seed saving techniques and participatory plant breeding through demonstration plots	<ul style="list-style-type: none"> <li>- <b>At least 500 qx of local seed varieties have been saved, involving 75 local farmers.</b></li> <li>- <b>75 local producers in each project site are familiarised with local seed saving and participatory plant breeding techniques. (50% women)</b></li> <li>- <b>2 demonstration plots</b> implement participatory plant breeding (Imilchil and Akka).</li> <li>- <b>4 sessions of seed breeding</b> and preparation were organised.</li> </ul>	<ul style="list-style-type: none"> <li>• Five training sessions (one in each site) on participatory plant breeding methods for organic products (involving male and female seed producers);</li> <li>• Preparation of guidelines on seed saving methods;</li> <li>• Collection of pollinators, original varieties and cultivars; and pilot cultivation of local cereal, pea, chickpea and lentil varieties in Imilchil and Akka;</li> <li>• Participatory seed testing and breeding for distribution.</li> </ul>						<ul style="list-style-type: none"> <li>- The only data available concern a few consumer requests, collected during 2019 SIAM in Meknes and established by the CPGG (the company that provided the training on organic products and ensures external control and certification according to national and international standards) on a voluntary basis</li> </ul>
<b>Component 4: Monitoring and evaluation</b>								
<b>Outcome 4.1</b> <b>The project is implemented following a results-based management</b>	Project outcomes are achieved and show sustainability							

<p><b>Output 4.1</b> The systematic field data collection system to monitor project performance indicators is operational</p>	<p>Project outcomes are achieved and show sustainability</p>	<ul style="list-style-type: none"> <li>• Project Progress Report (PPR) every six months</li> <li>• Annual Project Implementation Report (PIR) prepared by FAO (RTP).</li> </ul>						<ul style="list-style-type: none"> <li>- A monitoring-evaluation system was installed by the project at the level of INRA and FAOMA; however, the latter simply fed the PPRs and PIRs</li> </ul>
<p><b>Output 4.2</b> Final evaluation completed</p>	<p><b>Evaluation completed</b></p>							<p>Achieved</p>
<p><b>Output 4.3</b> dissemination of Information</p>		<ul style="list-style-type: none"> <li>• Disseminate information through publications, the project website and other channels to enhance adaptation to climate risks for the agricultural sector.</li> <li>• Maintenance of the project website</li> <li>• At least five publications will be issued throughout the project period on good practices and lessons learned through the project. All publications will be posted on the project website and will be distributed in print and electronic formats to local partners and government staff.</li> </ul>						<ul style="list-style-type: none"> <li>- A continuous exchange of information has been established between the project coordination, the national focal point at INRA and the partners of the five sites</li> <li>- However, the mission did raise, among the partners, concerns in terms of institutional communication (See Chapter on Monitoring and Evaluation).</li> </ul>

**6c. Detailed matrix of activities per site (elaborated by the evaluation team)**

OUTPUT	PLANNED ACTIVITY	SITE						COMMENT
		IM	AM	AK	AS	FG	CT	
Output 1.1	1. Development of questionnaires and surveys to collect existing information on local seed varieties and plant genetic resources							
Output 1.1	2. Seeds and seedlings from original varieties have been identified and mapping work to locate seed producers has been carried out in the five pilot sites							
Output 1.1	3. Tracking and monitoring seed exchange and flow in targeted oasis systems							
Output 1.1	4. Workshops involving many stakeholders, seed producers, extension agents, relevant local authorities, and partner institutions to discuss the results and evaluate outreach strategies for neighbouring communities;							
Output 1.1	5. Validation workshop.							
Output 1.1	6. Development of manuals/catalogues on local seed and seedling varieties							
Output 1.2	7. Multi-stakeholder workshops (at least two) to draft a regulatory framework for local seed varieties with seed producers, local authorities and government officials.							<i>Only one workshop was conducted</i>
Output 1.2	8. Regulatory framework validation workshop with key stakeholders							
Output 1.3	9. Production of training materials on participatory plant breeding and in situ conservation in five pilot sites							<i>However, there are no illustrated manuals or practical guides for outreach.</i>
Output 1.3	10. Five seed producer cooperatives are established in each pilot site							<i>Not achieved. But the project chose to build on existing cooperatives</i>
Output 1.3	11. Five networks of seed producers have been created (one in each of the project sites) to promote and organise the preservation, free distribution and exchange of open-pollinated seeds.							<i>Informal and unstructured networks</i>
Output 2.1.1	12. Support local agents in pruning, cleaning palm groves to avoid fire risks and leave space for production, pollination in order to obtain high quality dates in Ait Mansour, Assa, Figuig and Imilchil							
Output 2.1.1	13. Support farmers to understand the benefits of leguminous crop rotation as lentils, chickpeas, peas and beans.							
Output 2.1.1	14. Training of farmers on the use of organic fertilisers (date palm waste compost, manure) and on crop and pollination management;							


OUTPUT	PLANNED ACTIVITY	SITE						COMMENT
		IM	AM	AK	AS	FG	CT	
Output 2.1.2	15. Installation and maintenance of drip irrigation systems in three pilot palm orchards in Ait Mansour, Assa and Figuig;							
Output 2.1.1	16. Training of farmers on date palm and crop management techniques, including pollination in Ait Mansour and Assa							
Output 2.1.1	17. Training on livestock management integrated to agricultural production, including fences to impede livestock from accessing river banks, thus improving water quality in river grazing corridors;							
Output 2.1.1	18. Training of farmers on good practices to biologically manage and produce dates in Figuig							
Output 2.1.1	19. Purchase of an animal-drawn direct seed drill and installation of two plots for the direct sowing of cereals at two leading farms (0.25 ha), one in Imilchil and the other in Amellago.							
Output 2.1.1	20. Maintenance and improvement of soil organic matter through the use of compost in Ait Mansour, Assa, Figuig and Akka.							
Output 2.1.2	21. Rehabilitation and construction of gabion baskets and flood mitigation based on detailed hydrological studies in Akka, Figuig and Imilchil-Amellago							
Output 2.1.2	22. Ravine correction and organic stabilisation through reforestation in Imilchil-Amellago; training on organic techniques for stream control and ravine rehabilitation in Imilchil.							
Output 2.1.2	23. Planting of poplars for bank control in Imilchil							
Output 2.1.2	24. Training of agents on the "Palmivelle system" for sandy area revegetation in Akka and Figuig and coaching on preventive measures against salinity formation.							
Output 2.1.3	25. Training on the rehabilitation and management of khetaras and seguias in Imilchil- Amellago, Figuig, Ait Mansour, Assa Akka;							
Output 2.1.3	26. Rehabilitation of water diversion structures in Imilchil.							
Output 2.1.3	27. Training on economic use of irrigation water and hydro-agricultural adjustments in Imilchil.							
Output 3.1.1	28. Training of local producers in the creation of cooperatives and the setting up of "Economic Interest Groups" (EIGs) involving the public and private sectors.							
Output 3.1.1	29. Creation of four cooperatives and three EIGs.							<i>Not achieved. But the project chose to build on existing cooperatives and EIGs</i>
Output 3.1.1	30. Training of local stakeholders on the implementation of traceability systems for labelled products and the management of value chain documentation							

OUTPUT	PLANNED ACTIVITY	SITE						COMMENT
		IM	AM	AK	AS	FG	CT	
Output 3.1.1	31. Training on the use of the label, packaging, and marketing strategies.							
Output 3.1.2	32. Development of a GI label for Assiane dates from Figuig (preparation of labelling requirements and government endorsement request letter).							
Output 3.1.2	33. Development of a GI label for Imilchil cereals (preparation of labelling requirements and government endorsement request letter).							
Output 3.1.2	34. Development of an AL for Imilchil apples (preparation of labelling requirements and government endorsement request letter).							
Output 3.1.2	35. Development of a label for Imilchil wool (preparation of labelling requirements and government endorsement request letter).							
Output 3.1.2	36. Development of an AL for Figuig wool.							
Output 3.1.2	37. Training and awareness of 100 date producers, 50 cereal producers and 50 apple producers on GIs and the link with biodiversity protection and agricultural resources.							
Output 3.1.2	38. Support to 100 date producers, 50 cereal producers and 50 apple producers to set up a traceability system.							
Output 3.1.2	39. Support to 3 EIGs in the packaging of local products and the use of the PGI and agricultural label logos.							
Output 3.1.3	40. Organic certification of 640 Ha including 140 Ha in Ait Mansour, 40 Ha in Assa, 80 Ha in Akka, 100 Ha in Figuig and 300 Ha in Imilchil.							Only 390 Ha have been certified. The project was faced with the lack land in the five sites. The target values were overestimated in the Prodoc.
Output 3.1.3	41. 100 date producers, 50 apple producers, 50 organic cereal producers and 100 organic wool producers, are receiving training on organic farming techniques, labelling requirements and the use of the label							
Output 3.1.3	42. Exchange/study visits involving a group of 60 participants have been organised to organic farms in the Agadir and El Jadida regions.							
Output 3.1.3	43. 100 date producers, 50 cereal producers, 50 apple producers and 100 wool producers, are receiving a training on the implementation of a traceability system for organic agricultural products.							
Output 3.1.4	44. Training of a women's cooperative in Imilchil on techniques for adding value to improve food production (Couscous, and spaghetti).							

OUTPUT	PLANNED ACTIVITY	SITE						COMMENT
		IM	AM	AK	AS	FG	CT	
Output 3.1.4	45. Training of 20 local producers on date processing and production (syrup and paste)							
Output 3.1.5	46. A benchmarking exercise has been carried out to assess market opportunities for each labelled product							
Output 3.1.5	47. Based on the benchmarking, local producers are trained on the development of action plans that will improve the competitiveness of various agro-bio products.							
Output 3.1.5	48. Training of local producers on drawing up sales contracts.							
Output 3.1.6	49. Five training sessions (one in each site) on participatory plant breeding methods for organic products.							
Output 3.1.6	50. Preparation of guidelines on seed saving methods							
Output 3.1.6	51. Collection of original varieties and cultivars; pilot harvest of local cereal, pea, chickpea and lentil varieties in Imilchil and Akka.							
Output 3.1.6	52. Participatory seed testing and breeding for distribution.							
Output 4.1.1	53. Kick-off workshop							
Output 4.1.1	54. Preparation and validation of the AWP/B.							
Output 4.1.1	55. Preparation and validation of the M&E plan.							
Output 4.1.1	56. Conditions for regular monitoring and reporting (PPRs).							
Output 4.1.1	57. Evaluation.							
Output 4.1.1	58. Preparation of technical reports on good practices and lessons learned for dissemination.							
Project Management	59. Recruitment of project management staff							
	60. Bi-annual meetings of the CPF							

IM: Imilchil-Amellago Site; AK: Akka site, FG: Figuig site, AM: Ait Mansour site, AS: Assa site, CT: Central level (Rabat)

 Achieved

 Not achieved at the date of the mission

## Appendix 7. Theory of change

1. A theory of change is a results-based approach, much like a logical framework, but with more emphasis on the underlying assumptions of the intervention logic. It requires the application of critical thinking to the design, implementation and evaluation of initiatives and programs designed to support change in their context.
2. The theory of change helps to explain how activities or interventions are used to achieve desired results and how these results, in turn, lead to the intended impacts. During the documentation phase, the evaluation team "unpacked" the results chain of the project to understand the pathways between interventions, objectives, and expected impact.
3. Based on the project results value chain, the evaluation team developed a figure (inserted below) that illustrates the expected results and impacts, as well as the pathways to achieve them.
4. The theory of change is similar to the project intervention logic or the results chain developed in the project document. The only difference is that the links and assumptions in the causal chain between inputs and impacts are made explicit, so that, during the evaluation, evidence of implementation can be collected and assumptions tested.
5. The process adopted is based mainly on relevant literature review, including the GEF, FAO and country strategy and interviews with stakeholders. Based on the available documentation, the evaluators attempted to understand how activities (see Appendix 4), objectives, impacts align with, complement, and overlap each other. This analysis led to the development of a simplified intervention logic that encompasses the project activities.

## Appendix 8. GEF projects in Morocco

### 8a: GEF projects in agriculture from 1997 to 2016

Project	GEF grant In US\$	Co-financing In US\$	Status of implementation
<b>OASIL:</b> Revitalisation of oasis agro-ecosystems through an integrated and sustainable landscape approach in the Drâa-Tafilalet region <b>FAO/ANDZOA</b>	8 631 050	41 270 000	in the start-up phase
<b>GIAHS:</b> Biodiversity conservation and mitigation of land degradation through adaptive management of agricultural heritage systems <b>FAO/INRA</b>	771 918	7 850 000	in progress as of December 2019
Disposal obsolete pesticides including POPs and implementation of the integrated pest and pesticide management programme in Morocco <b>FAO/ONSSA</b>	3 500 000	24 246 626	in the implementation phase
<b>ASIMA:</b> Solidarity and Integrated Agriculture Project in Morocco <b>World Bank/ADA</b>	6 440 000	35 540 000	in the implementation phase
<b>IPAC-MAM:</b> Improving Productivity and Adaptive Capacities in Mountain Areas of Morocco <b>IFAD/ADA</b>	6 510 000	28 000 000	in the implementation phase
<b>EC-SMD:</b> A Circular Economy Approach to Agro-Biodiversity Conservation in the Souss Massa Drâa Region of Morocco <b>UNDP/ADA/ANDZOA</b>	2 647 272	7 500 000	in the implementation phase
<b>PICCPMV:</b> Integrating Climate Change in the Implementation of Green Morocco Plan <b>World Bank/ADA</b>	4 345 454	26 950 000	Closed (2015)
Transhumance for Biodiversity Conservation in the Southern High Atlas <b>UNDP/MAPMDREF</b>	4 252 000	5,387,000.00	Closed (2007)
<b>Total</b>	37 097 694	176 743 626	
<b>Total of GEF grants from 1997 to 2016</b>	138 022 788		



**8b: GCF projects in agriculture since 2016**

Project	GEF grant Million US\$	Total project cost Million US\$	Status
<b>DARED:</b> Development of Argan orchards in Degraded Environment <b>ADA/ANDZOA</b>	39.3	49.2	Approved
Irrigation development and adaptation of irrigated agriculture to climate change in semi-arid Morocco <b>AFD</b>	20	79	Under review
Water Conservation Project in Sais <b>EBRD</b>	35	227	Under review
Modernisation of the traditional irrigation system in the Souss region <b>ADA</b>	50	50	Under review
Strengthening agro-meteorological information for improved resilience and climate risk management <b>ADA</b>	6.62	6.62	Under review

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