



## **Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants Production Processes Lebanon**

**GEF ID: 3418, UNDP PIMS: 4008**

**Atlas Project Number: 00061785**

**GEF Agency: United Nations Development Programme**

**Executing Agency: Ministry of Environment and Nature Protection**

**GEF Biodiversity Focal Area, Operational Program 2, Strategic Objective BD-2**



### **Report of the Terminal Evaluation Mission**

**February, 2014**

**Dr. ArunRijal (Independent International Consultant/Evaluation Team Leader)**

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Production Processes  
Lebanon**

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**Project Period 2009-2013**

**Evaluation Team  
Arun Rijal, Ph.D. (International Consultant/Team Leader)**

**Terminal Evaluation Report  
February, 2014**

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This report is not only the work of the Terminal Evaluation Consultant but that of all the staff and people connected with the Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants (MAPs) project who gave freely their time and ideas to make the evaluation process a success. There are many people to mention by name – and everyone who contributed are included in the lists of names annexed to this report – but special mention must be made of Ms. Jihan Seoud, UNDP Lebanon Programme analyst, who provided required information and coordinated evaluation program, Mr. Hady Barond, Site Engineer, who gave unstintingly his time in accompanying me during the field missions, and Dr. Jihad R. Noun who shared information on the technical aspects of the project activities. All three answered every question I asked and discussed the points raised. I like to thank Mr. Johan Robinson, Technical Advisor for UNDP Regional Officer for sharing his opinion on the project. Ms. Joelle Salame from UNDP was very kind to help in preparing detail financial tables.

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The views expressed in this report are intended to offer an overview of, and some of the lessons learned from, this Project as it comes to its conclusion. I have tried to balance our thoughts and to offer fair perspectives of what was observed and learned from people far more knowledgeable about the Project and its context than we will ever be.

And finally, one of the delights of this sort of work remains that of visiting new and extremely welcoming country and going home again having made new friends, seen new things, and witnessed with great admiration the dedication and enthusiasm that so many people bring to their work in conserving the important plants of global significance. I would like to thank them and wish them every success in their continuing endeavours.

Arun Rijal, Ph.D.  
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Nepal  
18<sup>th</sup> September 2013

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## Acronyms and Terms

APR	Annual Project Report
BD	Biodiversity
CBE	Community based Enterprise
CBO	Community-based Organisation
CO	Country Office
GEF	Global Environment Facility
IUCN	International Union for the Conservation of Nature – The World Conservation Union
LARI	Lebanese Agriculture Research Institute
LFA	Log-frame analysis
MAP	Medicinal and Aromatic Plant
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
MoU	Memorandum of Understanding
MSE	Micro and Small Enterprises
MTE	Mid-term Evaluation
NEAP	National Environment Action Plan
NEX	National Execution
NGO	Non-Government Organisation
PB	Project Board
PIR	Project Implementation Report
PMO	Project Management Officer
ROtI	Review of Outcome to Impact
RRF	Result and Resource Framework
SME	Small and Medium Enterprise
SC	Steering Committee
TE	Terminal Evaluation
TEC	Terminal Evaluation Consultant
ToR	Terms of Reference
UNDAF	UN Development Assistance Framework
CPAP	Country Programme Action Plan
UNDP	United Nations Development Programme
UNDP HQ	UNDP Headquarter
US\$	United States Dollar

Currency of Lebanon is the Lebanese Pound (L£). At the time of the final evaluation, US\$ 1 = L£1500.

## Executive Summary

This Terminal Evaluation (TE) has been conducted as part of the Monitoring and Evaluation plan of the UNDP/GEF Project: “Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants Production Processes in Lebanon”, and will be referred to as the “Project” in the scope of this report. The TE mission to Lebanon was conducted from 19th June to 31<sup>st</sup> July 2013. Extensive consultations with the project partners were also conducted prior and following the mission to ensure a good understanding of the project’s results; leading to the submission of the TE report on the date of this report.

## Project Summary Table

As per GEF’s requirements for TE, the Project Summary Table is provided below:

<b>Project Summary Table</b>				
<b>Project Title:</b>	Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants Production Processes in Lebanon Project			
<b>GEF Project ID:</b>	<b>3418</b>		<b>at endorsement (US\$)</b>	<b>at completion (US\$)</b>
UNDP Project ID:	PIMS 4008	GEF financing:	980,000	968,798
Country:	Lebanon	LARI in Kind:	285,000	318,710
Region:	Arab States	UNDP in Kind:	515,000	515,000
Focal Area:	Biodiversity	UNDP cash:	150,000	150,000
Operational Programme:	Mainstreaming biodiversity (SO2)	<b>Total Project Cost:</b>	<b>1,930,000</b>	<b>1,952,508</b>
Executing Agency:	Lebanese Agricultural Research Institute (LARI)	ProDoc Signature (date project began):		15 June 2008
Other Partners involved:	Ministry of Agriculture	(Operational) Closing Date:	Proposed: 25 June 2011	Actual: 30 April 2013

## Brief Description of Project

Lebanon is very important for the flowering plant diversity with 2,600 species including 365 medicinal plants of which 47 (12%) are endemic to the country. It is estimated that about 365 local medicinal and aromatic plants (MAPs) are in use in Lebanon. The market of these medicinal and aromatic plants is worth approximately US\$35 million per year and out of this, the supply from wild stocks is approximately 98%. This massive collection from the wild resource base has threatened conservation of MAP biodiversity of global significance. This project believes that the conservation of threatened MAP species is possible by improving harvest practices and proving economic incentives to local people from the MAP business. By doing so, it will generate local guardianship for the conservation and sustainable harvest of MAP resource base. The project supported the sustainable management of 800 tons annually of the target species through both the pilot sites and at the national level. To achieve this objective, the project supported both the establishment of 4 community based MAP-Micro and Small Enterprises (MSEs), and value-added production system, as well as through the issuance of harvesting regulations.

The main threat to the MAP species is from unsustainable harvesting practices by non-local collectors. Such practices are encouraged by the short-term rent seeking practices in the MAP market where profit maximisation is sought through the high volume trade of low quality products over a relatively short investment period. Such practice in the situation of “open access” to wild MAP resource base created serious threat to the MAP species of global significances. Lebanon has resource-use and ownership rights but enforcement is almost inexistent. Similarly, poor articulation of access rights to MAPs allows commercial harvesters to have free and uncontrolled access to wild resource base. Moreover, gradual increase in inexperienced collectors has accelerated unsustainable harvest. There is lack of ownership



among the collectors as most of the collectors are not owners of the land as such they are not concerned with the future of these species. The informal and unregulated market and lack of organisational structure to enforce sustainability standards are obstacles to the conservation of MAPs. Since the harvest of MAP is only seasonal and for short duration there is less concern among collectors to acquire knowledge and skills on sustainable harvest.

The Project Objective is to integrate conservation objectives into gathering, processing and marketing of globally significant medicinal and aromatic plants (MAP); the project has set to achieve the following outcomes:

- i. Appropriate collection methods ensure a viable long-term supply of MAP raw materials of globally significant MAP species.
- ii. Value-added processing and product improvement result in increased value of globally significant MAPs harvested in biodiversity-friendly manner.
- iii. Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation-friendly MAP products.
- iv. Learning, evaluation, and adaptive management.

The Project Document was signed in 15 June 2008 for the duration of four years. The Project is implemented by the UNDP Country Office (UNDP CO) and it was executed in close coordination with the Lebanese Agriculture Research Institute (LARI). UNDP as implementing agency was responsible for the completion of all activities including procurement, recruitment, monitoring, and financial disbursement. The Project has been executed in accordance with the standard rules and procedures of the UNDP National Execution (NEX) Modality. The planned Project budget was US\$ 1,930,000 of which US\$ 980,000 was the GEF Grant, US\$150,000 UNDP grant, US\$285,000 LARI kind contribution and US\$515,000 UNDP in-kind contribution.

## Rating Table

As per UNDP and GEF's requirements for TE, the Terminal Evaluation Rating Table is provided below:

1. Monitoring and Evaluation	rating	2. IA & EA Execution	Rating
M&E design at entry	Highly Satisfactory	Quality of UNDP Implementation	Satisfactory
M&E Plan Implementation	Highly Satisfactory	quality of Execution - Executing Agency	Highly Satisfactory
Overall quality of M&E	<b>Highly Satisfactory</b>	Overall quality of Implementation / Execution	<b>Highly Satisfactory</b>
3. Assessment of Outcomes	rating	4. Sustainability	Rating
Relevance	Relevant	Financial resources:	Likely
Effectiveness	Highly Satisfactory	Socio-political:	Likely
Efficiency	Highly Satisfactory	Institutional framework and governance:	Likely
Overall Project Outcome Rating	<b>Highly Satisfactory</b>	environmental :	Likely
		Overall likelihood of sustainability:	<b>Likely</b>

**Note:** Justification of rating is given in Annex XI.

## KEY SUCCESSES

The project contributed to the development of legislation and regulating systems for the medicinal and aromatic plants (MAPs) sector in Lebanon. The project closely collaborated with the Lebanese Ministry of Agriculture and other concerned government institutions to develop a new Ministerial Decision which has mandated that any commercial collector must obtain a permit to collect, transport and export sage and oregano. As such, all sage and oregano collected in Lebanon should be collected under new sustainability



standards. Furthermore, the project has placed MAPs, mainly sage and oregano, on the agenda of several government institutions mainly Ministry of Agriculture, national customs and national standard organization (Libnor) which has created a positive change in the institutional perception of MAPs in Lebanon. Through these project activities, local collectors, middlemen and traders have begun to understand the link between sustainable harvesting, impact of their livelihoods and quality of the production. As such, a positive change in collectors' behaviour has resulted and also they were able to experience the implication of applying sustainability guidelines. The project conducted a study of seven project target MAP species to generate information on conservation status to include them in the IUCN Red list for long term protection arrangement.

## **KEY PROBLEM AREAS**

MAPs of global significance are threatened in Lebanon due to destructive harvesting and overharvesting from the wild which meets about 98% demand of the MAP market. The current unsustainable practices may lead to destruction of the resource base threatening the future supply to the market. Since most of the collectors were non-locals and not owners of the land, there was a lack of responsiveness among collectors. Lack of legal arrangement of ownership right, open access and weak enforcement of regulations encouraged over harvesting. The threat is more serious because the collectors lack knowledge on conservation values of the MAP species and thus practicing unhealthy competition in harvest and also there is no incentive for collectors to conserve such resources. In addition, unregulated informal market and seasonal or short term collection of MAP did not encourage agreeing upon sustainability standards and lack of organisational structure was obstruction to enforce such a standard.

## **Main conclusions, recommendations and lessons learned**

The Mainstreaming MAPs Project has been well designed, and well managed and implemented throughout, so stands as a testament. Despite difficulties in the beginning of the project, the team has managed to deliver a series of interventions that have significantly reduced the threats to two threatened MAP species namely *Salvia fruticosa* and *Origanum syriacum* and by generating information on all seven target species initiated process to include them in the IUCN Red list for conservation arrangement. The Project has been underpinned by good science and a technical approach of the highest calibre throughout. It has incorporated biodiversity issues into the landscape-level planning process in four pilot sites namely Hsarat, Assia, Mijdil and Mrustri; and improved the conservation situation by generating a local concern on the MAP species.

The project faced challenges in the selection of appropriate sites for piloting. Lack of reliable data on distribution, market and use made the selection process more challenging. The Project had to change previously selected sites due to the distribution-related problem of the selected species. The project team worked hard to generate reliable information that was needed to initiate the project activities and in this regards they visited more than 150 villages and met more than 200 stakeholders including local community members, local authorities, private sector, NGOs, religious orders, collectors, middlemen, certification bodies and quality control bodies of the government. They also conducted a thorough situation analysis of MAP sector in Lebanon to generate information on demand of the MAP products, distribution and status of the resource base, gaps in policy and implementation and market information.

The initial project plan was to focus on the entire value chain along with the development and implementation of sustainable wild harvesting standards of the seven species. In the first year of the project, a study was conducted on the distribution, abundances and market condition of these target species and based on the findings, a decision was taken to limit the intervention to two species only (*Salvia fruticosa* and *Origanum syriacum*) as their distribution and abundances were good and also comparatively better market potentiality. The remaining five previously targeted MAP species had limited geographic distributions, less abundance and limited market opportunity. The Project also decided to further study the remaining five species to generate their status and trend and use such information to develop conservation and management actions.

The Project was designed to address issues at the macro (national) and micro (pilot site) level. At the macro level it aimed to address policy gaps and implementation gaps while at the micro level it aimed to pilot the sustainable harvesting of MAPs. The legislative arrangements will create the environment for conservation with provision of regulated harvest and at the micro level, it experimented sustainable harvesting practices, development and value addition of the products, marketing, branding and certification. The project was able to utilise learning from the micro level for the policy update at the national (macro) level.

## Conclusion

Despite difficulties in the beginning of the project, the team has managed to deliver a series of interventions that have significantly reduced the threats to two threatened MAP species namely *Salvia fruticosa* and *Origanum syriacum* and, by generating information on all seven target species, have initiated the process to include them in the IUCN Red list for their protection. The Project has been underpinned by good science and a technical approach of the highest calibre throughout. It has incorporated biodiversity issues into the landscape-level planning process in four pilot sites namely Hsarat, Assia, Mijdil and Mrustri; and improved the conservation situation by generating a local concern on the MAP species.

The project was able to accomplish all activities to meet the targeted results. Project established 4 community-based enterprises, enhanced capacity of community institution, developed various training materials, harvesting standard, conservation Operation guidelines, identified institutional and policy gaps for improvement and generated database on MAPs of Lebanon.

**Recommendation:** The Project approach is piloted in four sites but threat to the rest of the areas of Lebanon still exists. Hence to achieve the overall goal, it is recommended to expand the horizon of the program by replicating it in all areas of Lebanon. Economic incentive encourages local communities to conserve important MAP. At present, the benefit margin is narrow. Hence additional effort is needed to increase economic return.

Not all MAP species has the same market value. Hence conservation of other species with less market value may need different arrangements like linking other activities with the conservation of these species. Such activities should be identified based on the local advantages i.e. identify potential activities for the area and link with species conservation (e.g. Eco-tourism and PES).

Government may not be able to allocate sufficient budget for monitoring and to replicate this model to rest of the part of the country so support from various donors may be needed. Involving private sector could also be one option to replicate these activities in other areas.

## Lessons Learned

**Lesson 1: Working directly through existing government structures brings dividends.** The Project chose to work directly through government institutions (LARI) rather than setting up parallel implementation structures. This decision has proved very successful not only in empowering government by providing experience and training, but also in developing effective government “ownership”, engagement, participation and motivation, thereby promoting long-term sustainability of the Project’s achievements.

**Lesson 2: Deployments of technical experts makes program technically sound.** Besides two site agro-engineers, the project also hired two senior agriculture/biodiversity experts to provide technical support to the project. The MAP Project use of multiple NGOs in the same locality has brought the best technical expertise to bear on local issues even at the slight costs incurred through increased complexity of approach. As a result, technical implementation has gone smoothly and brought about successful results,

of a higher standard than had the more pragmatic and more easily managed alternative of using a single organisation to cover all issues in a given locality been applied.

**Lesson 3: Economic incentives are important to achieve conservation goals.** Before the project intervention, the profit maximisation was sought through high volume, low quality trade. The Project intervention helped to increase economic incentives for the local collectors and community members by adding value to their product and linking their product to better markets. To add value, the project provided training on processing and product diversification which increased collector's economic return. Likewise to secure market for their products it was linked to national and international market through national cooperatives. Economic incentives with increased awareness and sustainable harvest knowledge assure conservation of MAPs.

**Lesson 4: Constant contacts with communities are vital to community-based natural resource management projects.** Good and regular communication in relation to project activities with the communities help community-based projects as it built trust and motivation of the local communities targeted. To achieve this, the quality and commitment of those employed as site engineer and assistants are key attributes of a project. This Project has been benefited with particularly experienced site engineers, but what the TEC believes to be the most important factor has been the almost constant contact that they have had with the communities throughout the Project's lifetime by deploying people on the ground for long periods of time. This frequency of contact has undoubtedly enabled the Project to build high levels of trust, capacity, and motivation which in turn has facilitated the change in people's mind-sets and behaviours and brought about the success.

**Lesson 5: Designing a project linking various institutions from grassroots level institutions, government agencies, local authorities and private sector generates huge benefits for sustainability, and through the synergies developed provides the intervention with much greater effectiveness than that which can be achieved by stand-alone projects.** The Project chose to work with various institutions of different levels and local communities. This helped in empowering these institutions by providing experience and training in a well-funded and well-equipped environment and also in developing effective "ownership", engagement, participation and motivation, thereby promoting long-term sustainability of the Project's achievements. It also helped to generate local guardianship (from community organizations or groups, local authorities and private sectors) that made project implementation efficient and effective.

**Lesson 6: Community organisations lack market knowledge so support to link them with the players (companies) of the market will help to provide economic incentives to communities and there by generate their cooperation for conservation.** Lack of market knowledge has been seen as a drawback in many projects limiting communities from getting sufficient benefits. Similarly, lack of knowledge, literacy and weak investment ability force them to accept available incompetent markets with limited benefits. Generating knowledge on various markets and providing knowledge to locals helps to link them with better markets and increase benefits from their products. Moreover, linking them with national cooperatives also helps to bring their product to better markets. Increased return for their products encourages communities to conserve their resources.

More Recommendations and Lessons Learned are listed on pages 40-42.

# **1. Introduction**

## **1.1 Purpose of the Evaluation**

As per UNDP's guidance for initiating and implementing terminal project evaluations of UNDP supported projects that have received grant financing from the Global Environmental Facility (GEF)<sup>1</sup>, this Terminal Evaluation (TE) has the following complementary purposes:

- To promote accountability and transparency, and to assess and disclose the extent of project accomplishments.
- To synthesize lessons that can help to improve the selection, design and implementation of future GEF financed UNDP activities.
- To provide feedback on issues that are recurrent across the UNDP portfolio and need attention and on improvements regarding previously identified issues.
- To contribute to the overall assessment of results in achieving GEF strategic objectives aimed at global environmental benefits.
- To gauge the extent of project convergence with other UN and UNDP priorities, including harmonization with other UN Development Assistance Framework (UNDAF) and UNDP Country Programme Action Plan (CPAP) outcomes and outputs.

The guidance is designed to enhance compliance with both UNDP and GEF evaluation policies and procedural requirements, which are consistent and mutually reinforcing, and use common standards<sup>2</sup>. The guidance also responds to GEF requirements to ensure that Terminal Evaluations of GEF-financed projects should include ratings of project's relevance, effectiveness, efficiency, monitoring and evaluation implementation as well as sustainability of results (outputs and outcomes).

By adopting "UNDP's guidance for Conducting Terminal Evaluations of UNDP-Supported GEF-Financed Projects", this Terminal Evaluation responds to both UNDP and GEF requirements for Terminal Evaluations.

## **1.1 Scope & Methodology**

This Terminal Evaluation (TE), carried out by an independent consultant, was initiated by UNDP Lebanon as the GEF Implementation Agency for the "Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants (MAPs) Production Processes in Lebanon" Project to measure the effectiveness and efficiency of Project activities in relation to the stated objectives, and to collate lessons learned.

The TE was conducted over a period of 25 days between 19<sup>th</sup> June and 31<sup>th</sup> July 2013 by an international consultant. The approach was determined by the terms of reference (Annex I) which were closely followed, via the itinerary detailed in Annex II. Full details of the objectives of the TE can be found in the TOR, but the evaluation has concentrated on assessing the concept and design of the Project; its implementation in terms of quality and timeliness of inputs, financial planning, and monitoring and evaluation; the efficiency and effectiveness of activities carried out and the objectives and outcomes achieved, as well as the likely sustainability of its results, and the involvement of stakeholders. The draft report was revised after receipt of comments and finalised on 18<sup>th</sup> September 2013. The text has been revised to correct factual inaccuracies in the draft or to include additional information and comments/suggestion from reviewers. The Terminal Evaluation consultant (TEC) has made responses to comments.

The evaluation was conducted through the following participatory approach to provide it with sufficient evidence upon which to base conclusions:

- extensive face-to-face and Skype/telephone interviews with the project management and technical support staff. Throughout the evaluation, particular attention was paid to explaining carefully the

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<sup>1</sup>Guidance for Conducting Terminal Evaluations of UNDP-Supported GEF-Financed Projects. Evaluation Office, UNDP. 2012

<sup>2</sup>The United Nations Evaluation Group (UNEG) norms and standards. <http://www.uneval.org>

importance of listening to stakeholders' views and in reassuring staff and stakeholders that the purpose of the evaluation was not to judge performance in order to apportion credit or blame but to measure the relative success of implementation and to determine lessons learned for the wider GEF context. Wherever possible, information collected was cross-checked between various sources to ascertain its veracity, but in some cases time limited this. A full list of people interviewed is given in [Annex III](#).

- face-to-face interviews with local stakeholders, particularly the collectors, cooperative members and village/municipality mayor;
- face-to-face interviews with Director General of LARI, Officials of Ministry of Agriculture and National Level Cooperative manager;
- a thorough review of project documents and other relevant texts, including the Project Document, revised log-frame, and monitoring reports, such as progress and financial reports prepared for UNDP and annual Project Implementation Reviews (PIR) for GEF, minutes of Project Board meetings, technical reports and other activity reports, relevant correspondence, and other project-related material produced by the project staff or partners; and
- field visits to Assia, Mijdil, Hsarat and Mrusti areas of the project.

Wherever possible the TE Consultant has tried to evaluate issues according to the criteria listed in the *UNDP-GEF Monitoring and Evaluation Policy*, namely:

- Relevance – the extent to which the activity is suited to local and national development priorities and organisational policies, including changes over time, as well as the extent to which the project is in line with the GEF Operational Programmes or the strategic priorities under which the project was funded.
- Effectiveness – the extent to which an objective has been achieved or how likely it is to be achieved.
- Efficiency – the extent to which results have been delivered with the least costly resources possible.
- Results – the positive and negative, and foreseen and unforeseen, changes to and effects produced by a development intervention. In GEF terms, results include direct project outputs, short-to medium term outcomes, and longer-term impact including global environmental benefits, replication effects and other, local effects.
- Sustainability – the likely ability of an intervention to continue to deliver benefits for an extended period of time after completion. Projects need to be environmentally as well as financially and socially sustainable.

The original logframe in the Project Document was revised significantly during the inception period and agreed in midterm report dated 11 April 2012. This new logframe, comprising four Components and four Outputs, and 11 indicators, has been used throughout as the basis for this evaluation (see [Annex VI](#)), and the TE has evaluated the Project's performance against these according to the current evaluation criteria provided to it by the GEF. This is reproduced in Annex XIII for clarity. Project results were measured against achievement indicators guided by evaluation questions (GEF tracking tools, Annex XI).

In addition, other scales have been used to cover sustainability (Annex XIII-ii), monitoring and evaluation, and to assess impacts. The Review of Outcomes to Impacts (ROtI) method also requires ratings to be made for outcomes achieved by the project and the progress made towards the 'intermediate states' at the time of the evaluation. The rating scale is given in Annex XIII- iii while Annex XIII-iv shows how the two latter ratings for "achievement of outcomes" and "progress towards intermediate states" translate into ratings for the "overall likelihood of impact achievement" on a six-point scale. A rating is given a '+' notation if there is evidence of impacts accruing within the life of the project which moves the double letter rating up one space in the six-point scale.

The results of the evaluation were conveyed to UNDP and other stakeholders ([Annex IV](#)). **Lessons learned** have been placed in boxes and further explained in page 40-42.

## **1.2 Constraints**

Due to time constraint, the evaluation could not go much detail analysis of financial performance of the project. The language was a barrier to the evaluator in the field and interpretation by independent interpreter other than project staff could have helped to learn more from the experiences and perspectives of different stakeholders.

## **1.3 Structure of the Evaluation Report**

The TE report is structured in line with UNDP's guidance and covers the following Sections:

- Project description and development context
- Findings
  - Project Design / Formulation
  - Project Implementation
  - Project Results
- Conclusions, Recommendations & Lessons
- Annexes.



## 2 Project Description and Development Context

### 2.1 Project Start and Duration

The Project Document was signed in 15 June 2008 for the duration of four years. However, few project activities were undertaken in the first year. Project activities were officially launched in August 2009 with the recruitment of a new project manager. The project ended in April 2013. The Mid-term Evaluation was conducted in February 2012. Final evaluation was conducted in July 2013. After a thorough ground study, four pilot sites viz. Hsarat, Assia, Mijdil and Mrustri were selected to implement the project activities.

The key timelines which were planned or expected for project implementation are shown in Table below.

#### Key timelines planned or expected for project implementation.

Key project's milestones	Date
Project Document Signature date	15 June 2008
Project activities launched	August 2009
Original Planned Closing Date	25 June 2011
Actual Closing Date	30 April 2013

### 2.2 Problems that the Project sought to Address

Lebanon lies within an important centre of flowering plant biodiversity, with approximately 2,600 species and an endemism rate of 12%. Around 365 medicinal and aromatic plants (MAPs) are found and utilised in Lebanon of which 47 are endemic to the region. The MAP and herb domestic markets are worth approximately US\$35 million per year and wild stocks supply approximately 98% of the MAP markets and the current practices are threatening the market's supply base as well as globally significant biodiversity values.

The main threat to the MAP species is from unsustainable harvest practices by non-local collectors. Such practices are encouraged by the short-term rent seeking practices in the MAP market where profit maximisation is sought through high volume trade of low quality products over a relatively short investment period. No attempt was made before to add value and increase benefit which otherwise could generate concern of the local communities and thereby generate local stewardship for the conservation of important MAP species. Such practice in the situation of "open access" to wild MAP resource base created serious threat to the MAP species of global significances. Lebanon has resource-use and ownership rights but enforcement by government is almost inexistent and in such situation locals could secure their resources by themselves. Lack of market knowledge and limited benefit margin from local market distracted the local communities' interest. Similarly, poor articulation of access rights to MAPs allows commercial harvesters to have free and uncontrolled access to wild resource base. Moreover, gradual increase in inexperienced collectors has accelerated unsustainable harvest. There is lack of ownership among the collectors as most of the collectors are not owners of the land, as such they are not concerned with the future of these species. The informal and unregulated market and lack of organisational structure to enforce sustainability standard are obstacles to the conservation of MAPs. Overharvesting and destructive harvesting practices are further encouraged by the supplementary nature of the revenue. MAP harvesting as a business is picked up when opportunity affords. MAP harvest is in general considered as an addition or "bonus" to the collector's annual source of income and the temporary engagement of collectors in the MAP business does not provide enough incentives to acquire knowledge and skills on environmentally-friendly harvesting. Also the fact that



collectors are paid by the bag creates an incentive to include as much biomass as possible, even plant parts which are not useful.

To address the problem, the project was designed to work at both a macro level (national scale) and a micro level (pilot sites scale). On the national level, it aims to develop and strengthen the enabling environment for sustainable use of MAPs through the identification of legal constraints and the required intervention points at the regulatory level. Similarly, at the micro level it aimed to work at developing sustainable harvesting standards, product development and value-added processing, marketing and sales and certification and branding. Based on the analysis of endemism, global significances, trade status, IUCN Red List and CITES status seven highly threatened species were selected. The target MAP species are: *Origanum syriacum* (oregano), *Salvia fruticosa* (sage), *Cyclotrichium organifolium*, *Micromeria libanotica*, *Viola libanotica*, *Alcea damascene*, and *Origanum ehrenbergii*. However, the focus of economic development was only on two species (*Origanum syriacum* and *Salvia fruticosa*). The remaining five target species were studied for listing in IUCN Red list and arranging needed legislation for conservation.

### **Immediate and Development Objectives of the Project**

The overall project goal is to secure globally significant Medicinal and Aromatic Plants (MAP) in Lebanon, which form a resource-base for local livelihood and national development. The project objective is to integrate conservation objectives into the gathering, processing and marketing of globally significant MAP.

The project aims to achieve its stated objective through following four outcomes:

- Outcome 1: Appropriate collection methods ensure a viable long-term supply of raw materials of globally significant MAP species
- Outcome 2: Value-added processing and product improvement result in increased value of MAPs harvested in biodiversity-friendly manner
- Outcome 3: Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation-friendly MAP products.
- Outcome 4: Learning, evaluation, and adaptive management.

### **2.3 Baseline Indicators Established**

To measure the achievement of the project, baseline indicators were established and are as follows:

*Objective:* To integrate conservation objectives into the gathering, processing and marketing of globally significant MAPs.

- Population Index for the 6 globally significant species in three selected monitoring areas (amount collected per unit of collection effort).
- Population density of selected target species (plot counts)
- Threat Reduction Assessment Index (TRA index)
- Amount of MAPs collected from the wild following sustainable harvesting practices
- Number of local people directly gaining income from MAPs increases or remains at least constant

*Component 1:* Appropriate collection methods ensure a viable long-term supply of raw materials of globally significant MAP species

- Percentage of collectors applying destructive harvesting practices (unnecessary uprooting, no rotation of collection areas, early collection).
- MAP harvest follows resource use plans set jointly by the private sector, local communities and conservation experts
- Number of traders/processors conditioning purchase to sustainable harvesting practices.
- Community-based MAP-MSEs established.

*Component 2: Value-added processing and product improvement result in increased value of MAPs harvested in biodiversity-friendly manner*

- Volumes of target species traded in processed form (volumes to be determined for each target species)
- Increased price of MAPs along the value chain from raw products to locally manufactured products
- Number of value-added branded products manufactured according to WWF and WHO quality standards.

*Component 3: Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation-friendly MAP products.*

- Portion of MAP consumers aware of the existence and importance of sustainably harvested MAP products
- Number of properly labelled MAP-derived products
- National MAP Association functional
- Agreed sustainability standards available for target species
- Number of community-based enterprises applying certain ecological standards (certification).

*Component 4: Learning, evaluation, and adaptive management.*

- Annual updates of gender analysis, risk mitigation strategy and impact assessment

## 2.4 Main Stakeholders

The UNDP CO provides technical and financial support and also fulfils the role of monitoring. Agriculture Research Institute (LARI) is the implementing agency of the project. The project will work in close cooperation with the *Ministry of Economy and Trade*, the *Ministry of Industry*, the *Ministry of Environment*, the *Ministry of Agriculture* as well as the *Chamber of Commerce, Industry and Agriculture* (CCIA) and several NGOs. Other stakeholders of the project are municipalities and village committees, local communities, local and national cooperatives.

## 2.5 Expected Results

The project aims to achieve its objective through four outcomes which will have a total of 15 outputs. These outcome and outputs are as follows:

Outcome 1: Appropriate collection methods ensure a viable long-term supply of MAP raw materials.

Output 1.1: Community-based MSEs for MAP collection and primary processing established.

Output 1.2: Collectors trained in MAP identification and sustainable harvesting methods.

Output 1.3: Certification system for sustainable harvest applied.

Output 1.4: Community-based resource use plans set up.

Outcome 2: Value-added processing and product improvement result in increased value of globally significant MAPs harvested in biodiversity-friendly manner.

Output 2.1: Manufacturing and trading companies upgraded and linked with the community based MAP-MSEs.

Output 2.2: Locally processed MAP products branded.

Output 2.3: Innovative MAP based products developed and introduced into the market.

Outcome 3: Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation-friendly MAP products.

Output 3.1: National MAP association established as private sector entity.

Output 3.2: Guidelines on sustainable harvesting practices agreed, training modules developed and widely applied.

Output 3.3: Certification system developed, agreed and put into practice.

Output 3.4: Regulative framework on collection, processing, and on national and international trade developed.

Output 3.5: Consumer awareness for sustainably harvested products raised.

Outcome 4: Learning, evaluation and adaptive management achieved.

Output 4.1: Monitoring program established.

Output 4.2: Adaptive management and strategic planning system established.

Output 4.3: Lessons learned and impact data are gathered, documented and disseminated to key internal and external audiences.

As per the project document, seven species are supposed to be targeted. They are: *Origanum syriacum* (oregano), *Salvia fruticosa* (sage), *Cyclotrichium organifolium*, *Micromeria libanotica*, *Viola libanotica*, *Alcea damascene*, and *Origanum ehrenbergii*.

**Table 1: Summary of expected global environmental benefits arising from the Project.**

<b>Outcome 1:</b> Appropriate collection methods ensure a viable long-term supply of MAP raw materials of globally significant MAP species	<ul style="list-style-type: none"> <li>• Sustainable management regime for globally significant MAPs will be established.</li> <li>• Increase knowledge on sustainable harvest of MAPs among collectors to address threat of destructive harvest of globally significant MAPs.</li> </ul>
<b>Outcome 2:</b> Value-added processing and product improvement result in increased value of globally significant MAPs harvested in biodiversity-friendly manner.	<ul style="list-style-type: none"> <li>• Provide economic incentives from value addition to the sustainably harvested MAPs of global significance to encourage collectors to conserve them.</li> <li>• Collectors and local communities and others connected to this business will act as guardian to conserve important MAP species.</li> </ul>
<b>Outcome 3:</b> Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation-friendly MAP products	<ul style="list-style-type: none"> <li>• Sustainable management regime for sustainable harvest will be established to conserve MAPs of global significances.</li> <li>• Permit based on scientific methods will address problem of over harvest.</li> <li>• Enforcement of regulations and management plans will address property right issues and regulate open access problem which is main threat to globally significant MAP species.</li> <li>• Establish National MAP association, development and implementation of guidelines on harvest training, practice certification, increase awareness of collectors, develop regulatory frameworks to make collection of globally significant MAPs sustainable.</li> </ul>
<b>Outcome 4:</b> Learning, evaluation and adaptive management achieved.	<ul style="list-style-type: none"> <li>• Establish monitoring plan to help adaptive management and strategic planning practices for the conservation of globally significant MAPs.</li> <li>• Knowledge management and dissemination in wide audience will help conservation initiatives at different places.</li> </ul>

Baseline indicators were fully established and the latter given in the Project Document ahead of the Project's commencement.

## 3 Findings

### 3.1 Project Design/Formulation

The project was designed to address the problem by developing MAPs as a resource-base for local livelihood and national development. The project aimed to integrate conservation objectives into the gathering, processing and marketing of globally significant MAPs. The design of the Result and Resource Framework (RRF) was very clear with clear outputs milestones, activities for each outputs and SMART indicators to monitor implementation and achievements. The project was designed to work at both a macro level (national or government scale) and a micro level (pilot sites or local scale). On the national level, it aimed to develop and strengthen the enabling environment for sustainable use of MAPs through the identification of legal constraints and the required intervention points at the regulatory level. Similarly, at the micro level it aimed to work at developing sustainable harvesting standards, product development and value-added processing, marketing and sales and certification and branding. Seven MAP species namely *Origanum syriacum* (oregano), *Salvia fruticosa* (sage), *Cyclotrichium organifolium*, *Micromeria libanotica*, *Viola libanotica*, *Alcea damascene*, and *Origanum ehrenbergii* were the target species of the project. However, after initial feasibility studies, the focus of economic development was only on two species (*Origanum syriacum* and *Salvia fruticosa*). The remaining five target species were studied for listing in IUCN Red list and arranging required legislation for conservation. At the design phase project identified four sites for piloting which were changed at the implementation phase as preselected sites did not contain sufficient area and quantities of the target species.

The implementing and executing institutions were involved in the project from the project design phase. The project design involved a thorough analysis of capacities of various partners and their interests. Project design has incorporated lessons learned from several relevant projects in Lebanon and this region (explained above). Role and responsibilities of implementing partner (LARI) and other institutions (MoA, cooperatives, municipalities, and villages committees) is very clearly defined in the project design. Hence to address these problems, the project was designed to apply following approaches:

- (i) Focus of mainstreaming efforts will be on the MAP industry, specifically MAP harvesting, processing and marketing.
- (ii) Less destructive sustainable harvests together with income generation from the MAP business for local people will maintain population, species and ecosystem diversity.
- (iii) Trigger conservation and sustainable use of MAPs through value addition to MAP produces.
- (iv) The project's mainstreaming approach is built based on experience from past projects in Protected Areas and land use planning.
- (v) The project will exert influence on the mode of land use through empowering local groups of resource users.
- (vi) Develop capacity of local collectors and forest rangers to make harvest sustainable, improve monitoring to address open access problem.
- (vii) Develop conservation operational guideline for better management of MAPs.
- (viii) Implement certification system to regulate unsustainable harvest and promote community production. This will also secure property right and address open access related problems.
- (ix) Documentation and dissemination of information generated by the project will help future strategy development by the government and other agencies to safeguard MAPs of global significances.

#### 3.1.1 Analysis of Logical Framework

The log frame has a single development objective, no immediate objectives but 4 outcomes. The extensive activities are also listed in full, complete with their own indicators. The objectives, components and outputs

are clear and appropriate to the issues and also designed considering the timeframe of the project. Project also utilised lessons from other project (see in 3.1.3) and also capacity of executing/implementing agencies considered while developing project activities (see 3.1.4 & 3.1.8). Project design sufficiently analysed potential risks and assumptions (see 3.1.2) related to the project and it is well articulated in the PIF. Role and responsibilities of the partners were made clear from the project design phase (see 3.1.8). The original log-frame had some problems including inappropriately written indicators. The logical framework was revised in 2010 and indicators were adjusted to make them more realistic. The number of outputs was only 15 in the original logframe while in the revised one there was an increase of two outputs (1.4 & 1.6) to make the new total of 17. There was plenty of room to simplify output and indicators by merging some of the outputs and rephrasing them e.g. output 1.3 and 3.3 both mention about the certification for sustainable harvest and output 2.2 and 2.3 both talk about development of MAP product, branding and marketing. Likewise, 1.2 and 3.2 both talk about training module and conducting sustainable harvesting training. Avoiding such duplication could simplify the logframe. The log frame also recommended conducting ground monitoring to generate information on the status of the target species. The revised log-frame includes 4 outcomes, 18 outputs and only 12 indicators.

The indicators of the logframe are all SMART (Specific; Measurable; Achievable and attributable; Relevant and realistic; Time-bound, timely, trackable and targeted) and are relevant and precise. All are based on sound scientific monitoring protocols using the most relevant measures for a given criteria. Some inappropriately written indicators were corrected at Inception phase.

### **3.1.2 Assumptions and Risks**

All the risks and assumptions set in the project document were logical and robust. These helped to identify appropriate activities and required precaution measures to address the risks and assumptions. Arrangements for all risks and assumptions other than related to natural fluctuation were made and with these arrangements, project was able to implement activities effectively to achieve the targeted results. One assumption was related to potential natural fluctuations (e.g. weather or climate change or other natural calamities) and its impact on MAP population but no such natural fluctuations took place within the project period. Similarly, project also assumed that the overall market and political conditions will remain appropriate. Fortunately, no changes took place in MAP market and also project did not suffer from any political changes. Project assumed to receive support from political decision-makers to the project initiatives. Awareness generation and program implementation by the project was able to receive support from the decision-makers and the government authority also expressed their commitment for the post project period also.

### **3.1.3 Lessons from other Relevant Projects incorporated into Project Design**

The project's mainstreaming approach was built on a number of completed activities in the field of land management, e.g. protected areas management and land use planning. These efforts include the GEF funded "Protected Areas Project (PAP)", the project "Strategic Environmental Assessment and Land Use Planning in Lebanon (SEA)", the project "Stable Institutional Structure for Protected Areas Management (SISPAM)", the "Combating Desertification in Lebanon" Project (CoDeL) funded by Germany and UNDP, and the GEF project "Conservation and Sustainable Use of Dry land Agro-biodiversity in the Near East". These studies provided information on different conservation approaches for MAPs in Lebanon or this region.

UNDP-GEF supported project failed to achieve financial sustainability from the protected area approach<sup>3</sup>. Moreover, land is scarce in Lebanon and MAP habitats face pressure from urban encroachment and efforts to resist these pressures through establishment of protected area system have not been successful in

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<sup>3</sup> Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants Production Process. Project Document, UNDP CO Lebanon 2008.



Lebanon. Likewise, GEF supported projects related to MAPs in Egypt and Jordan taught that site-based approach is not sufficient to maintain genetic diversity as MAPs are widely distributed and distribution area is far beyond the normal size of protectable units.

Similarly, regarding spatial planning approach, Strategic Environmental Assessment and Land Use Planning in Lebanon (SEA) project taught that due to scattered distribution of MAP, it is difficult to conserve through spatial planning processes because unlike many species or habitats with clearly defined boundaries of occurrence, it is very difficult to take a spatial planning approach to MAPs. MAPs are scattered all over the region and occur in a wide range of habitats. Likewise, regarding cultivation of MAPs to divert pressure from the wild resource base, an economic assessment conducted by LARI showed high economic risks in cultivation in rain fed land compare to MAPs collected from the wild with no economic risk.

Approach of market regulation has been tried in Lebanon and has failed. The problems with market regulation include: lack of knowledge with the law enforcement officer to identify MAP species, limitation of resources for the application of the laws and the informal nature of the industry itself. Moreover, as the target species include species consumed in the daily life, such as *Origanum*, restrictions on its usage was unlikely to be effective.

Transforming the MAP industry as a means of maintaining the conservation status of globally significant MAP species was tried in the Arab region before and it faced several barriers and risks. Taking lessons from those projects, business feasibility and economic comparative studies, as well as stakeholders' surveys were conducted to see feasibility of this approach in Lebanon for the target species.

Learning from the above mentioned projects were incorporated in design of this project.

#### **3.1.4 Planned Stakeholder Participation**

According to the prodoc, the project was planned to be implemented following the UNDP National Execution (NEX) modality in close coordination with Lebanese Agriculture Research Institute (LARI). The project worked in close cooperation with the Ministry of Economy and Trade, the Ministry of Industry, the Ministry of Environment, the Ministry of Agriculture as well as the Chamber of Commerce, Industry and Agriculture (CCIA) and several NGOs. Project execution was carried out by LARI working on behalf of the Government of Lebanon. Other stakeholders of this project were local and national cooperatives, local government institution, local collectors and local land owners.

At the project development phase, the project development team undertook extensive consultations with interested parties through a series of opinion polls, presentations, interviews, group discussions and workshops. These wide-ranging consultations were undertaken to ensure that stakeholders at all levels are aware of the project and its objectives and that they assist in the identification of threats to globally significant MAP species and the determination of the root causes. Stakeholders were also involved in the identification of the GEF project concept and the design of the project. A thorough assessment of relevancy, experience and capacity of implementing partner and other implementing stakeholders was also conducted. This assessment also helped to utilise strength of the implementing partners and also develop capacity enhancement programs.

#### **3.1.5. Replication Approach**

According to the project document, this project intend to test innovative approach of dealing with the threats and use lessons from this piloting to address problem at national scale. It also planned to upscale the project concept throughout the country through national MAP business association. But the MAP business



association was not formed because project management felt that there is no need of it because the existing National MAP steering committee (SC) could undertake all the activities expected to be done by MAP national association and they believe this will be cost effective also. Map steering committee is government entity while intended MAP association was private sector entity. SC may not be able to encourage private sector to replicate such activities throughout the country. Its responsibilities do not include up scaling of project concept throughout the country and also human and financial resources impede government entity to accomplish such task.

Project tested conservation approach with dual benefits of income generation and conservation. The learning from this project could be useful for other parts of Lebanon, Middle East and elsewhere with similar situations. Hence for the benefit of projects and for replication in other areas, project disseminated lessons learned to a wide audience through various means like report distribution, information sharing through different network, shared with other GEF projects, international networks like IUCN Medicinal Plants Specialist Group and the FAO through the Non-wood News webpage.

The “International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants” (ISSC-MAP), currently is being developed jointly by the *World Wide Fund for Nature (WWF)*, the *TRAFFIC* network, the *German Agency for Nature Conservation* and *IUCN–The World Conservation Union*. Information collected from piloting of sustainable harvesting will be useful in developing framework of principles and criteria for above mentioned standardization of sustainable wild collection and management of MAPs at the global level.

### **3.1.6 UNDP Comparative Advantage**

The sustainable management and rational use of the natural resources has been considered by UNDP to be essential to its strategy to alleviate poverty and biodiversity conservation. Accordingly, and in line with the government’s national priorities, support to good governance in the fields of environmental and natural resource management was also a priority area. At the time of its design, the MAP Project was deemed to be congruent with these priorities as elaborated in the first United National Development Assistance Framework (UNDAF 2001-2005) where sustainable management of natural resources is one of the priority programme areas for Lebanon, and the second UNDP Country Co-operation Framework (CCF 2001-2005). The project is in line with the pillars of technical and financial assistance which form the foundation from which markets can be transformed to increase biodiversity in rural landscapes. Specifically, the project will help realise four of the eight pillars identified by UNDP-GEF:

- Development of the capacity of the rural population to work on biodiversity friendly production systems;
- Scaling up of the use of environmental standards and certification to verify production systems;
- Engagement of companies and consumers in increasing the demand for biodiversity friendly products and services;
- Provision of accessible and affordable financing for micro and SMEs engaged in investments benefiting biodiversity.

UNDP has been working in the field of environment protection, biodiversity conservation, disaster risk reduction and sustainable use of natural resources for economic development and poverty alleviation. UNDP has a lot experience from these areas. The project has benefited from UNDP experience from the project development phase to implementation. This project aimed to encourage national and local authorities and communities in biodiversity conservation by enhancing their capacities and thereby address conservation issues of MAP species of global significance. Similarly, project also aimed to use natural resources in a sustainable way for rural economic development and poverty alleviation.

However, the project document has not sufficiently included global and national assets (experience/knowledge) of UNDP in order to inform the strategy and implementation approach of this project.

### **3.1.7 Linkages between Project and other Interventions within the Sector**

Project tested the “International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants” (ISSC-MAP), currently being developed jointly by the World Wide Fund for Nature (WWF), the TRAFFIC network, the German Agency for Nature Conservation and IUCN–The World Conservation Union. The findings from the piloting will contribute to fine-tuning the international standard for developing a framework of principles and criteria that can be applied for the management of MAP species and their ecosystems; to provide guidance for management planning; to serve as a basis for monitoring and reporting; and to recommend requirements for certification of sustainable wild collection of MAP resources.

As per the plan indicated in the project document, the findings (lessons learned) were distributed to many relevant audiences including other GEF funded projects dealing with MAPs (listed below):

- Egypt: Conservation and Sustainable Use of Medicinal Plants in Arid and Semi-arid Ecosystems (UNDP, FSP); a mid-term evaluation to be carried out in autumn 2006. The results and lessons learned will be taken into account for the final design of the project.
- Ethiopia: Conservation and Sustainable Use of Medicinal Plants (IWRB, FSP);
- India: Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States (UNDP, FSP);
- Jordan: Conservation of Medicinal and Herbal Plants (IWRB, FSP);
- Sri Lanka: Conservation and Sustainable Use of Medicinal Plants (IWRB, FSP);
- Zimbabwe: Conservation and Sustainable Use of Traditional Medicinal Plants (UNDP, MSP);
- Regional (West Africa): Enhancing Conservation and Rationale Utilization of Medicinal, Aromatic and Pesticide Plants through Sustainable Land Management (UNEP, FSP);
- Regional (Central America): Biodiversity Conservation and Integration of Traditional Knowledge on Medicinal Plants in National Primary Health Care Policy in Central America and Caribbean (UNEP, MSP).

Few of the above mentioned GEF funded projects are in the arid and semi-arid climatic conditions (Egypt and Jordan) where similar species exists so the findings from this study will be very useful for them. In other project areas though the climate and species may varies but the issues like overharvesting/unsustainable harvesting, open access and weak enforcement of control measures are common, so the lessons from this project will give idea for mainstreaming the MAPs, designing for piloting of sustainable harvest practices, value addition for improving economic returns, capacity enhancing and policy improvement.

### **3.1.8 Management Arrangement**

UNDP National Execution (NEM) modality was applied to ensure broad stakeholder participation and to create both a high flexibility and an enabling environment for innovation. Project was executed under the execution of UNDP CO in close coordination with LARI. Regular meetings were conducted to discuss on progress and constraints of the project. UNDP maintained high-quality technical and financial implementation of the project through its local office in Lebanon. UNDP CO also assured activities implementation, monitoring and ensuring proper use of GEF funds to assigned activities, timely reporting of implementation progress as well as undertaking of mandatory and non-mandatory evaluations. All services for the procurement of goods and services, and the recruitment of personnel were conducted in accordance with UNDP procedures, rules and regulations.

As per organisational structure, National Project Manager was hired by UNDP to oversee the project activities. Similarly, the Project had two site engineers (Mr. Hady Brood and Ms. Carol Hachen) and two agro-biodiversity expert (Dr. Jihad R. Noun and Dr Leamann) to provide technical support to the project), one office assistant, one field assistant and part time technical consultants all hired by UNDP CO to facilitate activities of the project. A National Project Director position was held by the Director General of LARI. The project was implemented in close coordination with LARI. The implementing partner was identified based on the thorough exercise of analysis of relevancy, experience and willingness of potential agencies.

The Project's management and implementation focused on the revised log-frame (revised in 2010) throughout. The project team made an effort in raising awareness and developing capacity amongst stakeholders to provide a solid baseline of understanding prior to, and continuing through, development of the Project's main activities. The role and responsibilities of executing and implementing parties was made clear prior to signing the project document. A thorough review of relevant legislations was carried out to ensure that there will not be any legislative problem for the project implementation. Similarly, agreement on co-funding was made before signing the project document. Similarly, staffs, equipment and logistics were in place by the time of initiation of project.

## **3.2 Project Implementation**

Four pilot sites (Hsarat, Assia, Mijdil and Mrustri) were selected by the project to develop and implement sustainable harvest standards for Sage and Oregano, to establish community-based small enterprises for MAP collecting and primary processing and to create market linkages between these enterprises and manufacturing and trading companies. The pilot sites are located in the villages of Mejdel and Hsarat (where the target species is sage), Assia and Mristi (where the target species is oregano).

### **3.2.1 Adaptive Management**

The Project's adaptive management has been good throughout, stemming from the highly capable management, backed by good decision-making by the Project Board and support and advice from the UNDP-CO. Adaptive management has operated effectively at both the strategic level and the tactical level.

The MTE made 9 recommendations and positive responses were made to the majority – the management response listing “agreed” to all of them.

The Project monitored the impact, adoption success and challenges of the new Ministerial Decision on different stakeholders (Ministry of Agriculture, collectors, middlemen, trainers, traders and customs) and provided appropriate practical suggestions for necessary amendments to the MAP sector regulation.

The project was designed to pilot in four preselected sites but later, based on the preliminary assessment report, all four sites were replaced by completely new sites as in the previous sites distribution of target species was not so good. Similarly, original project document had plan to focus on the entire commercial value chain of the seven target species but based on the preliminary study findings it was limited to two species (*Salvia fruticosa* and *Origanum syracum*) only.

Adaptation of inception report recommendation and recommendation from MTR by the project management is described under the heading “Feedback from M&E activities used for adaptive management”.

No major change was made in the project design and no new outputs added but only prioritisation to outputs was done according to suggestion from the MTR. Project period was extended by one year as per suggestion from the MTR to complete all targeted task.

### 3.2.2 Partnership Arrangement

The Project has been implemented through the **United Nations Development Programme (UNDP)** and it was executed in close coordination with the **Lebanese Agriculture Research Institute (LARI)**. UNDP as implementing agency was responsible for the completion of all activities including procurement, recruitment, monitoring, and financial disbursement. Thus, the Project has been executed in accordance with the standard rules and procedures of the UNDP NEX Modality.

The project involved four communities, local administrative bodies, collectors, ministries, forest department, national manufacturing company, cooperatives (local/national level cooperatives) and Nature reserve (i.e. Mrusti). One of the key design aspects of the Project, which has proved very successful, is that it used existing government management structures namely the Lebanese Agriculture Research Institute (LARI) of the Ministry of Agriculture rather than creating parallel structures and contributed in empowering it. LARI works at the local level with the farmers so it has experience of working with local communities. Government structures are more permanent than NGOs so working with government institutions assures technical support to communities beyond the project life. The research part was conducted by hiring consultants and project engineers while other activities were conducted involving communities, collectors, cooperatives and local administrative bodies.

The Project focussed efforts on building local capacity for making harvest sustainable, improve quality and diversity of products and market local products in the national market. The research findings and experience from working with local stakeholders provided the project with information for the formulation and amendment of legislations, development of conservation strategy and enhancement capacity of the staff. Pilot site activities and coordinated activities with the ministry had a central role in the success of the project. Awareness generation, improvement of harvest practice, awareness and species identification skills among forest staff and training of ministry staff have contributed a lot in creating an enabling environment for the smooth progress of the project. These capacity enhancements, commitment from government agency and policy back up are likely to make project initiative sustainable in the long-term.

The Project reached a wider audience by awareness generation through exhibitions, media coverage and webpages of UNDP and LARI. Quality knowledge products (reports, booklets, manuals etc.) of the project were also distributed to a wide range of audiences. All project outputs / deliverables were uploaded on websites for wide and easy access. The Project has also uploaded a short documentary on project impact in one pilot site (Mejdel) on YouTube (<http://www.youtube.com/watch?v=tsRzD28I76c>). Training documents on sustainable wild harvesting of MAPs in Lebanon and the Ministerial Decision regulating wild harvesting, transport and trade of sage and oregano in Lebanon are uploaded on the websites and YouTube (<http://www.youtube.com/watch?v=tsRzD28I76c>). Media coverage includes 1 television program, 3 radio interviews, 3 magazine articles and 10 newspaper articles.

The TEC found that stakeholder engagement and participatory approaches have been of the highest order throughout.

The Project has worked closely with many stakeholders throughout and the active engagement of stakeholders has been vital to fulfilling its achievements, hence stakeholder participation is evaluated as **Highly Satisfactory**.

### 3.2.3 Gender

Gender issues were well addressed in staff recruitment (80% female including project manager) to community organisations. All local cooperatives had a good number of female members and one cooperative was totally managed by women members (i.e. Mrusti). This has not only provided financial benefits to women but also contributed in leadership development of women. This provides women opportunity to make decision on their interest. At the ministry, the project was coordinated by a team of female staff members and the national cooperative was also headed by the dynamic female Director. The

project has contributed to improve the financial condition of local women as many harvesters were women and this helped to improve their livelihood. Gender-disaggregated data developed by the project will help to analyse benefit distribution. Similarly, gender elements were included in contracts with local enterprises, such as community-based MAP-MSEs and companies for value-added MAP production.

### **3.2.4 Feedback from M&E Activities used for Adaptive Management**

Based on the initial studies, project has chosen only two MAP species (*Origanum syriacum* and *Salvia fruticosa*) for piloting project's enterprise based conservation activities because study suggested that the five other species were not suitable for commercial sustainable harvest (mainly due to their localized distribution) and therefore no pilot sites were established by the project for these species to develop and implement sustainable harvest standards, to establish community-based small enterprises for collecting and primary processing and to create market linkages between these enterprises and manufacturing and trading companies.

With respect to these five MAP species, MTR recommended to focus on their IUCN red list classification in the last year of the project. Project followed the recommendation of the MTR.

MTR suggest considering as experimental sites for sustainable harvest standards, for value-added processing and product improvement, for marketing through memorandum of understanding between community-based enterprises and manufacturing and trading companies, and for certification and branding. It was followed by the project.

MTR recommended reinforcing the developmental dimension of the four pilot sites in its last year of implementation. Therefore, it was suggested that Atayeb Al Rif (the first cooperative specialized in marketing in Lebanon), which was contracted by the project to support the community-based enterprises in the pilot sites, focuses its efforts in 2012 on: 1) effectively supporting these enterprises to market their products in the national market, and 2) helping them to sustain their MAP business after the closure of the project. Recommendation of MTR was followed by the project.

MTR recommended extension of the project by one year at no cost to provide time to completed suggested milestones under the regulative framework, accomplish IUCN red list classification of five remaining MAP species, training of staff of the ministry of agriculture on sustainable wild harvesting and on the implementation of the new regulation, reinforce the developmental dimension of the four pilot sites with respect to value-added processing and product improvement, certification and branding, ensuring marketing channels, development of community business plans and refinement of the standards of sustainable wild harvest. As per recommendation the extension was made and extended time was used to accomplish above mentioned MTR recommendations.

### **3.2.5 Project Finance**

The total planned project cost was US\$1,930,000 which includes US\$1,130,000 in cash and US\$800,000 in kind. Of these the GEF contribution is US\$980,000 in cash, UNDP contribution US\$150,000 in cash, LARI contribution US\$285,000 in kind and UNDP contribution US\$515,000 in kind (Table 2 and 3). If Project spending is used as a basis to measure the progress of implementation, then the Project has achieved the progress originally envisaged with some additional achievements. Co-financing was well planned and clearly mentioned in the project document. According to the project document earlier expectation from GEF was US\$1,078,000 but due to GEF requirement of co-financing ratio of at least 1:1 this was changed. The UNDP contribution was same as mentioned in the project document but LARI contribution was increased i.e. from US\$285,000 to US\$318,710. LARI co-financing was increased due to extension of project timeframe. The executing and implementing agencies made close monitoring of financial transactions and program implementation and timely materialised the fund for activities by re-allocation of fund and this helped to accomplish activities for desired results.



- Project management costs (Component 4) were primarily funded by GEF (52%), but were co-financed by UNDP (28%) and LARI (20%). Project management costs ran more than projected;
- Project management costs comprised about 27% of the total spend, which is higher than GEF permitted level (10%). Time extension due to the delay in project implementation (at the beginning) had increased the management cost of the project.
- The project was co-financed by the GEF, UNDP and LARI and the final GEF : co-finance ratio in terms of monies spent was 1:1 (US\$980,000 to US\$950,000), a good result (GEF expect co-financing ratio of minimum of 1:1)<sup>4</sup>;
- Spending on Component 1 was highest i.e. 34.4% (US\$ 671,958.15) followed by component 4 with 26.2% (US\$512,091.51) and component 2 with 24.2% (US\$472,642.2) while spending on component 3 was lowest with 15.2% (US\$295,816.44);
- GEF and UNDP funding was mainly re-allocated in Component 1, 2 and 4 while LARI support was almost equal to all four components (Table 2). Of the total GEF fund, 35% spend on component 1; 22.6% on component 2; 15.3% on component 3 and 27.1% on component 4. Of the UNDP fund, nearly 39% spend on component 1; 27.1% on component 2; 11.1% on component 3 and 22.8% on component 4. Similarly, of the LARI contribution, 23.12% spend on component 1; 23.12% on component 2; 23.12 on component 3 and 30.67% on component 4.

**Table 2: Total disbursement of funds by output (to end June 2013) (US\$) against full project budget as per Project Document.**

	GEF			UNDP			LARI (co-financing in kind)			Total		
	Budget	Actual	%	Budget	Actual	%	Budget	Actual	%	Budget	Actual	%
Component 1	308,000.00	339,360.88	110.18	250,000	258,944.27	103.6%	85,500.00	73,653.00	86.14	643,500.00	671,958.15	107.23
Component 2	218,000.00	218,680.26	100.31	180,000	180,308.94	100.2%	85,500.00	73,653.00	86.14	303,500.00	472,642.2	96.42
Component 3	359,000.00	148,115.47	41.26	70,000	74,047.97	105.8%	85,500.00	73,653.00	86.14	514,500.00	295,816.44	50.80
Component 4	95,000.00	262,642.01	276.47	165,000.	151,698.50	91.13	28,500.00	97,751.00	342.99	288,500.00	512,091.51	181.75
Total	980,000.00	968,798.62		665,000	664,999.68		285,000.00	318,710.00		1,930,000	1,952,508.3	101.2

SOURCE: UNDP.

Analysis of budgeted and actual expenditure shows big difference in mainly components 3 and 4. In component 3, actual expenses were far less than budgeted. At the design phase large budget was allocated to bear cost of international consultant. But at implementation, those works were accomplished at a lower price and also most of the technical works were undertaken by the project team themselves which saved money. While in case of component 4, expense was increased due to increased management cost owing to no-cost extension of one year project period. Similarly, UNDP CO undertook two salary surveys and based on that, salaries of the staffs were increased which also contributed to increase management cost. The project was delayed in the initial phase but cost increase was only US\$36,508.3, which is comparatively less because an average annual management cost of project was US\$124,273 (Table 2).

Tables 3-6 show the disbursement of GEF, UNDP, and LARI funds by component over time. LARI in-kind contribution covers cost of office rooms (2), cost of electricity, telecommunication, laboratory facilities, vehicle, mandays of national project coordinator (National Focal Point) and researchers involved in field monitoring of medicinal and aromatic plant diversity. UNDP in-kind contribution covers cost of activities like Capacity building of MAP MSE in South and North Lebanon, Capacity building for municipalities in South and North Lebanon on sustainable use of natural resources including MAPs, Promoting cultivation of *Origanum syriacum* and *Salvia fruticosa* to reduce pressure on the wild resource

<sup>4</sup> Co-financing (GEF/C.20/6/Rev.1

base, awareness raising on importance of quality harvested MAPs and selecting MAP products with most evident synergies and added value to further assess its livelihood, business and market access potentials.

Personnel from Ministry, municipality, cooperative and I/NGOs were found very impressed from the project as they were praising the achievement of the project. Ministry officials, Director General of LARI, Mayors (Assia) and Nature Reserve official (Mrusti) also expressed commitment to continue support to the project activities. Similarly, Mayor of Assia assured that they will allocate funds for these activities and also informed that they already applied to various donors to generate fund for expanding these activities.

**Table 3: Total disbursement of GEF funds (US\$) by Component by year against budget as per Project Document**

	2008			2009			2010			2011		
	Budget	Actual	%	Budget	Actual	%	Budget	Actual	%	Budget	Actual	%
Component 1	120,837.00	2,756.40	2.28	117,587.00	35,776.13	0.30	38,587.00	52,578.47	136.26	30,989.00	142,561.45	460.04
Component 2	45,762.00	2,756.35	6.02	82,312.00	12,801.19	0.16	47,982.00	33,344.99	69.49	41,944.00	65,892.01	157.10
Component 3	76,312.00	7,666.60	10.05	121,212.00	23,466.49	0.19	104,062.00	28,103.30	27.01	57,414.00	46,410.41	80.83
Component 4	22,675.00	25,423.73	112.12	22,675.00	60,270.81	2.66	22,675.00	56,371.15	248.60	26,975.00	44,215.96	163.91
<b>Total</b>	<b>265,586.00</b>	<b>38,603.08</b>		<b>343,786.00</b>	<b>132,314.62</b>		<b>213,306.00</b>	<b>170,397.91</b>		<b>157,322.00</b>	<b>299,079.83</b>	

**Table 3: Cont...**

	2012			2013			Total		
	Budget	Actual	%	Budget	Actual	%	Budget	Actual	%
Component 1	-	66,427.75	-	-	39,260.68	-	308,000.00	339,360.88	110.18
Component 2	-	86,804.06	-	-	17,081.66	-	218,000.00	218,680.26	100.31
Component 3	-	32,901.27	-	-	9,567.40	-	359,000.00	148,115.47	41.26
Component 4	-	21,075.08	-	-	55,285.28	-	95,000.00	262,642.01	276.47
<b>Total</b>	<b>-</b>	<b>207,208.16</b>		<b>-</b>	<b>121,195.02</b>		<b>980,000.00</b>	<b>968,798.62</b>	

SOURCE: UNDP.

**Table 4: Total disbursement of LARI co-funding (US\$) by Component by year.**

	2008	2009	2010	2011	2012	2013	Total		
							Budget	Actual	%
Component 1	5,040.00	13,353.00	14,685.00	16,335.00	16,335.00	7,905.00	85,500.00	73,653.00	86.14
Component 2	5,040.00	13,353.00	14,685.00	16,335.00	16,335.00	7,905.00	85,500.00	73,653.00	86.14
Component 3	5,040.00	13,353.00	14,685.00	16,335.00	16,335.00	7,905.00	85,500.00	73,653.00	86.14
Component 4	10,080.00	18,851.00	19,295.00	19,845.00	19,845.00	9,835.00	28,500.00	97,751.00	342.99
<b>Total</b>	<b>25,200.00</b>	<b>58,910.00</b>	<b>63,350.00</b>	<b>68,850.00</b>	<b>68,850.00</b>	<b>33,550.00</b>	<b>285,000.00</b>	<b>318,710.00</b>	

SOURCE: UNDP.



**Table 5: Total disbursement of UNDP cash funds (US\$) by Component by year against budget as per Project Document.**

	2008			2009			2010			2011		
	Budget	Actual	%	Budget	Actual	%	Budget	Actual	%	Budget	Actual	%
Component 1	-	-	-	-	-	-	-	-	-	-	7,266.80	-
Component 2	-	-	-	-	-	-	-	-	-	-	308.94	-
Component 3	-	-	-	-	-	-	-	-	-	-	4,047.97	-
Component 4	37,500.00	-	-	37,500.00	-	-	37,500.00	26,021.77	69.39	37,500.00	43,954.72	117.21
<b>Total</b>	<b>37,500.00</b>	<b>-</b>		<b>37,500.00</b>	<b>-</b>		<b>37,500.00</b>	<b>26,021.77</b>		<b>37,500.00</b>	<b>55,578.43</b>	

SOURCE: UNDP.

**Table 5: Cont...**

	2012			2013			Total		
	Budget	Actual	%	Budget	Actual	%	Budget	Actual	%
Component 1	-	887.47	-	-	790.00	-	-	8,944.27	-
Component 2	-	-	-	-	-	-	-	308.94	-
Component 3	-	-	-	-	-	-	-	4,047.97	-
Component 4	-	66,722.01	-	-	-	-	150,000.00	136,698.50	91.13
<b>Total</b>	<b>-</b>	<b>67,609.48</b>		<b>-</b>	<b>790.00</b>		<b>150,000.00</b>	<b>149,999.68</b>	

**Table 6: Total disbursement of UNDP kind contribution (US\$) by Component by year against budget as per Project Document.**

	2008		2009		2010		2011	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
Component 1	150,000	150,000	100,000	100,000	-	-	-	-
Component 2	-	-	-	-	-	-	80,000.00	80,000.00
Component 3	-	-	-	-	-	-	30,000.00	30,000.00
Component 4	-	-	-	-	-	-	-	-
<b>Total</b>	<b>150,000</b>	<b>150,000</b>	<b>100,000</b>	<b>100,000</b>	<b>-</b>	<b>-</b>	<b>110,000.00</b>	<b>110,000.00</b>

**Table 6: Contd...**

2012		2013		Total	
Budget	Actual	Budget	Actual	Budget	Actual
-	-	-	-	250,000	250,000
50,000	50,000	50,000	50,000	180,000	180,000
40,000	40,000	-	-	70,000	70,000
15,000	15,000	-	-	15,000	15,000
105,000	105,000	50,000	50,000	515,000	515,000

Table 3 shows the actual funds spent for each component by year. These show clearly that Component 1 was funded by the GEF with peak disbursement in 2011; Component 2 funding by the GEF peaked disbursement in 2012; and Component 3 which was funded largely by the GEF with peak disbursement made in 2011. These expenses correspond to the work accomplishment in respective years. Project management costs (Component 4) peaked in 2009 with a significant input from UNDP, believed to be connected with the preparatory work.

Throughout, LARI has exhibited excellent financial planning and management skills in dealing with the Project in terms of the array of activities undertaken. At all times, the director of the LARI has been kept abreast of the Project's progress through good reporting and this has allowed the necessary budget revisions to be made on a sound basis. Similarly, the link between LARI and the UNDP-CO has been efficient in ensuring that budget replenishments have been timely and there have been no inherent procedural delays.

**Table no 7: Co-financing of the project.**

Co-financing (type/source)	UNDP own financing (mill. US\$)		GEF (mill. US\$)		LARI (mill. US\$)		Total (mill. US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants	150,000	149,999.65	980,000	968,798.62	-	-	1,130,000	1,118,798.27
Loans/Concessions	-	-	-	-	-	-	-	-
• In-kind support	515,000	515,000	-	-	285,000	318,710	800,000	833,710
• Other	-	-	-	-	-	-	-	-
<b>Totals</b>	<b>665,000.00</b>	<b>664,999.65</b>	<b>980,000.00</b>	<b>968,798.62</b>	<b>285,000.00</b>	<b>318,710.00</b>	<b>1,930,000.00</b>	<b>1,952,508.27</b>

## 3.2.6 Monitoring and Evaluation: Design at Entry and Implementation

### *M&E Design*

The Project design contained an excellent monitoring and evaluation (M&E) plan which was very comprehensive in its depth and scope. The project had logframe to monitor achievement and logframe had clear objectives, components and outputs and appropriate to the issues and also designed considering the timeframe of the project. A detailed survey was conducted following the standard scientific methods to develop baseline of MAPs which helped to judge impact of intervention. Role and responsibilities of the partners were made clear from the project design phase. The indicators of the logframe were all SMART (Specific; Measurable; Achievable and attributable; Relevant and realistic; Time-bound, timely, trackable and targeted) and are relevant and precise. At the stage of the Inception Report, clarification and updates were made to the M & E plan but no major change was made. MTR also did not make any change in output but suggested prioritization of the regulative framework-related outputs and suggested extension by one year without additional cost to accomplish targeted activities.

All activities were listed and explained, and a table was included determining responsibilities, budgets and timeframe for each. Budgets were set realistically, with a total of US\$50,500 (fifty thousand five hundred) being set aside specifically for M&E activities. Baselines were already set in the Project Document. The inclusion of indicators for each activities were not only very appropriate and useful for evaluation but also very good for management purposes.

The design of M&E was of a standard much advanced over that normal for the design period, with a fully itemised and costed Plan included in the Project Document covering all the various M&E steps including the allocation of responsibilities; hence monitoring and evaluation design has been evaluated as **Highly Satisfactory**.

### ***M&E Implementation***

Monitoring and evaluation of Project activities have been undertaken in varying detail at three levels:

- i. Progress monitoring
- ii. Internal activity monitoring
- iii. Impact monitoring

Progress monitoring has been good and has been made through quarterly and annual reports to the UNDP-CO. The annual work plans have been developed at the end of each year with inputs from Project staff and the UNDP-CO. The annual work plans were then submitted for endorsement by the Project Board (PB), and subsequently sent to UNDP for formal approval. The implementing team has also, been in regular communication with the UNDP-CO regarding progress, the work plan, and its implementation. The indicators from the logframe were effective in measuring progress and performances. Project management has also ensured that the UNDP-CO received quarterly progress reports which provided updates on the status of planned activities, the status of the overall project schedule, the products completed, and an outline of the activities planned for the following quarter. These reports' format contained quantitative estimates of project progress based on financial disbursements. The UNDP-CO generated its own quarterly financial reports from Atlas. These expenditure records, together with Atlas disbursement records of any direct payments, served as a basis for expenditure monitoring and budget revisions, the latter taking place bi-annually following the disbursement progress and changes in the operational work plan, and also on an *ad hoc* basis depending upon the rate of delivery.

From the quarterly reports, the UNDP-CO has prepared Quarterly Operational Reports which have been forwarded to UNDP/GEF Regional Coordination Unit, and also upload all the information on ATLAS. The major findings and observations of all these reports have been given in an annual report covering the period July to June, the Project Implementation Review (PIR), which is also submitted by the Project Team to the UNDP-CO, UNDP Regional Coordination Unit, and UNDP HQ for review and official comments, followed by final submission to the GEF. All key reports were presented to PB members ahead of their half-yearly meetings and through this means, the key national ministries and national government have been kept abreast of the Project's implementation progress.

The Project Management Office (PMO) and the UNDP-CO have maintained a close working relationship, with Project staff members meeting, or talking with, CO staff on an almost daily basis to discuss implementation issues and problems.

The Project's risk assessment has been updated quarterly by the PMU and UNDP-CO with the main risks identified along with adequate management responses and person responsible (termed the risk "owner"), who in most cases differs from the person who identified the risk.

A Mid-term Evaluation (MTE) was undertaken in February 2012. The report contains no formal ratings for any of the elements usually rated, although the words "*satisfactory*", "*highly satisfactory*" and "*Moderately satisfactory*" appear liberally. The report does not discuss efficiency, effectiveness, sustainability, lessons learned, gender perspective, adaptive management, cost-effectiveness and replication aspects. It suggested prioritization of the regulative framework-resulted outputs. A complete reading of the report returns an overview that the Project was considered to be on track.

Internal activity monitoring undertaken by UNDP CO, LARI and the Project Manager appears to have been good comprising a range of mechanisms to keep abreast of the situation and to respond quickly and

effectively to any areas of concern. These comprised many of the methods used to track progress, and implementation has been heavily guided by the Annual Work Plan and the quarterly plans submitted to release funds. Generally the Project has been small enough not to require formalised communication or monitoring procedures; members being in almost daily contact. Where external contracts have been issued, these were on a lump-sum basis payable according to milestones defined by time and quality – failure to achieve either resulting in forfeiture of some part of the payment. By and large, this provided enough incentive for sound delivery.

Unusually, impact monitoring has been very well-developed, with formal protocols in place to measure illegal unsustainable harvest, economic activities of community cooperatives, regeneration of target species, harvest quantity and harvest practice etc. using state-of-the-art scientific methods. Undoubtedly this has arisen from the strong scientific backgrounds of the Project's designers, enhanced by the same of its technical staffs and managers. As is most often the case, the adaptive management of the Project has been influenced to a much greater extent by external variables and overcoming the problems (or taking opportunities) that these have presented than by responding to internal monitoring.

M&E implementation has been of a very high standard, with excellent progress monitoring and strong internal activity monitoring. Good responses have also been made to the mid-term review and the risk assessments, and the TEC considers it to be “good practice”, hence the implementation of monitoring and evaluation has been evaluated as **Highly Satisfactory**.

### **3.2.7 UNDP and Implementing Partners Implementation / Execution, Coordination and Operational Issues**

#### **Project Oversight**

UNDP National Execution (NEX) modality was applied to ensure broad stakeholder participation and to create both a high flexibility and an enabling environment for innovation. Project was executed under the execution of UNDP CO in close coordination with LARI. There was very good communication and coordination between Implementing and executing agencies. Regular meetings were conducted to discuss progress and constraints of the project. UNDP had ensured high-quality technical and financial implementation of the project through its local office in Lebanon. UNDP CO was responsible for implementing activities, monitoring and ensuring proper use of GEF funds to assigned activities, timely reporting of implementation progress as well as undertaking of mandatory and non-mandatory evaluations. All services for the procurement of goods and services, and the recruitment of personnel were conducted in accordance with UNDP procedures, rules and regulations. LARI execution assured achieving targeted result on time, adequate and appropriate management practices, program planning and properly implementing and timely reporting. Risk management strategy was developed involving all partners and experts through detail analysis of issues and was effectively implemented. LARI provided office space and also other services including laboratory facilities, technical manpower, information and throughout the project period no short coming of support was experienced by the project team. Also, the capacity of the LARI staff was enhanced for strengthening performance. Since LARI involvement was on behalf of Government of Lebanon, there is Government ownership in this project.

The technical management of the Project was of the highest standard. The Project has deployed expertise of the highest calibre, whether internationally or nationally, and the more than 30 outputs/deliverables which have been developed have also been excellent whether these are specialist material, e.g. development plans; scientific material, e.g. harvest manuals, MAPs base line study report, monographs, brochures, legal document etc. The Project had two site engineers to provide technical input to the project but besides that, the project also hired highly qualified experts to strengthen the technical aspects of the project. The LARI annual report highlighted success of the project and also the Ministry of Agriculture was satisfied from the achievement of the project.

Though the project was officially initiated June 2008 only few activities were carried out in the first year. Project activities were officially launched in August 2009 with the recruitment of a new project manager. Project faced two major challenges concerning the number of preselected target species and project pilot sites.

The Project has been well-organised and well-managed throughout providing products of the highest technical quality on time and within budget, while responding effectively to a range of internal and external challenges through good adaptive management, hence the implementation approach has been evaluated as **Highly Satisfactory**.

### **UNDP Supervision and Backstopping**

UNDP supervision was accomplished by standard procedures and undertaken competently. Unusually, TEC received no complaints from interviewees about excessive UNDP bureaucracy or delays in procurement, and UNDP's heavy requirements for reporting.

Supervisions were made through UNDP's involvement in cooperation with the Ministry of Agriculture, LARI and other stakeholders. Members of the Energy and Environment Cluster were heavily involved in regular issues such as the review and approval of work plans and budgets, review of progress and performance against such work plans, and completion of the tracking tools. It appears that the CO was helpful and supportive throughout the implementation period, responding adequately by providing good guidance, honest and constructive criticism, and helps to overcome particular problems as necessary. UNDP support was focused towards achieving targeted results and support was appropriate, adequate and timely and the project staffs were satisfied from the UNDP support. The annual planning was done on time with active participation of partners. Similarly, risk management options were identified in close consultation of partners and experts and the project was able to manage risk efficiently. The speed of the project was slow in the first year but later by appointing a new project manager the implementation went smoothly. Due to initial delay, there was time constraint at the end of the project to accomplish all tasks so an extension was made from June 2012 to 30 April 2013.

UNDP have provided an adequate level of supervision and backstopping to the Project, and its performance has benefitted as a direct result, hence UNDP's supervision and backstopping role is evaluated as **Satisfactory**.

## **3.3 Project Results**

### **3.3.1 Overall Results**

#### ***Attainment of Objectives:***

The project helped to conserve MAP species of global significances by addressing their threats and also provided economic benefits to local communities which make conservation sustainable by generating local stewardship for conservation such important species. The following arrangements were made for the conservation of globally significant MAP species:

- Established sustainable management regime for sustainable harvest.
- Increased knowledge on sustainable harvest of MAPs among collectors to address threat of destructive harvest practices.
- Provided economic incentives from value addition to the sustainably harvested MAPs to encourage collectors to conserve them. This helped to generate local guardianship to conserve MAPs of global significance.
- Implementation of permit system based on scientific methods help to address problem of overharvest.

- Enforcement of regulations and management plans address property right issues and regulate open access problem which is main threat to globally significant MAP species.
- Establishment of National MAP Steering committee, development and implementation of guidelines on harvest training, practice of certification, increased awareness among collectors, development and implementation of regulatory frameworks help conservation and sustainable utilisation of globally significant MAP species.
- Establishment of monitoring plan to adaptive management and strategic planning practices help in conservation of globally significant MAPs.
- Knowledge management and dissemination in wide audience help conservation of species of global significances at global level.

A Summary of the Project's achievements is given directly below, followed by an outline of the attainment of objectives. This is followed by a Review of Outcomes to Impacts in Table 8 and a brief discussion on the verifiable impacts. A summary evaluation of Project Outputs is given in Table 9 followed by a more detailed description. A detailed evaluation of the level of achievements made against the indicators of success contained in the log frame is given in Annex IV.

### ***Summary of Achievements***

The MAP Project has been well designed, and well-managed and implemented throughout. The project team has managed to deliver a series of interventions that have significantly reduced the threats to globally significant and locally threatened MAPs which was having very good regeneration in the pilot sites. In the process, the Project has demonstrated a number of innovative approaches particularly through economic incentive approaches that could be expanded within the region or be replicated elsewhere in the country. One of its biggest strengths has come about through a design-decision to work directly through existing government structures (LARI) rather than parallel project structures. LARI is an institution under the Ministry of Agriculture allowing the project to work in close cooperation with Ministry, and government institutions taking full ownership for most of the Project's outputs. Excellent work in the four pilot sites brought benefits to many community members thereby laying a solid foundation for improved understanding of, and cooperation on, MAP biodiversity conservation issues in the future. As will be seen below, the achievement of the outputs and activities under each of the four Outcomes has been evaluated as highly satisfactory, and the evaluation of achievements against indicators (provided in Annex IV) show that all of the activities and accomplished with 100% success. Moreover, it has achieved some additional outputs also besides set indicators e.g. worked on four additional MAP species, national distribution surveys and density assessments for 3 species, contributed to the new decree with information from implementation of the Ministerial decision etc. Project helped to address threat related to unsustainable harvest to globally significant MAP species by enhancing appropriate collection methods, increasing awareness, strengthening supply chain framework and value addition to MAP products.

Overall, the Project has achieved all its major global environmental objectives, and yielded substantial global environmental benefits, without major shortcomings. The project can be presented as “good practice”, and hence its attainment of objectives and results is evaluated as **Highly Satisfactory**.

Key Project achievements include:

#### *Community-based enterprises (CBE) for MAP collecting and primary processing established*

- Identified pilot sites and CBEs based on a comprehensive and strategic field investigation process in more than 150 villages/sites and meetings with meetings with more than 200 stakeholders
- Established CBEs for wild MAP collection and processing at the 4 project pilot sites
- Besides revising inactive cooperatives, established a new cooperative in Mrusti pilot site
- Equipped the CBE's at each project pilot site with the required equipment, machinery and infrastructure in order to improve post-harvest and primary processing of MAPs



- Built capacity of the CBE for effective management, sustainable use of natural resources and improve quality of products.

*Collectors trained in MAP identification and sustainable harvesting methods*

- Local collectors and forest rangers knowledge on importance and sustainable harvest of MAPs developed. Also training materials and tools on sustainable harvest, processing and cultivation developed.

*Certification system for sustainable harvest developed and applied*

- Developed and implemented standards for sustainable MAP harvesting from the wild based on vigour technical field work
- Incorporated sustainable wild harvesting standards into a new national certification for high quality Lebanese products “*Cedar Excellence*” seal which assure quality, hygiene, social and economic criteria. Similarly, cooperatives from the project sites obtained organic and wild harvesting certificate for two seasons. The project sites were assisted to obtain organic and wild harvesting certification for two seasons.

*Management plans for target species collection from project sites developed and implemented*

*Community-based resource use agreements set up and enforced.* This agreement is supported by the Ministerial decision on requirement of permits. Resource management is included in the management plans developed for all pilot sites.

*Conservation assessments carried out following IUCN Red list criteria.* Comprehensive species assessment and monitoring conducted. This generated much information which was not available earlier. Process of listing of seven target MAPs in IUCN Red list is initiated through conservation assessment.

*Manufacturing and trading companies upgraded.*

*Locally processed MAP products branded “Lebanese VILLAGE Product”.* The brand name is owned by UNDP and the right to use is given to Atayeb Al Rif national cooperative by signing MoU.

*Innovative MAP based products developed and introduced into the market.* Bio-chemical analysis was conducted scientifically to guarantee quality.

*National MAP Steering Committee established to facilitate roles and partnerships important to on-going sustainable management of MAP resources in Lebanon.* Also conservation operational guidelines for medicinal and aromatic plants in Lebanon developed.

*Guidelines on sustainable harvesting practices and/or conservation strategies agreed for each target species, training modules developed and widely applied.*

*Regulative framework on collection, processing as well as on national and international trade developed.*

*Consumer awareness for sustainably harvested products rose.*

The main problem areas identified by the TEC are:

- Ministry of Agriculture expressed their support to project activities but funds were not committed to cover operational costs to maintain law enforcement operations or to follow up on the assessment of the resource base;

- At the time of TE, no guaranteed commitment from any non-governmental/development partners was available to assist to further strengthen the achievements of the project and also for replication in other areas of Lebanon.

### ***Objective Indicators***

A single “Project Objective” was articulated in the log frame which has been considered as a development objective. No immediate objectives were given. The overall project goal is to secure globally significant Medicinal and Aromatic Plants (MAP) in Lebanon, which form a resource-base for local livelihood and national development. The project objective is to integrate conservation objectives into the gathering, processing and marketing of globally significant MAP. The project aims to achieve its stated objective through four outcomes. Furthermore, during the log-frame’s revision, a series of 12 impact indicators were defined for 17 sub outputs (of the 4 outputs). Full details and an evaluation of achievements against targets are provided in Annex IV. Project was able to accomplish all targeted activities and achievements indicated. Besides, some additional achievements were also made (see table 9 and Annex IV) by the project. The TEC believes this to be an extremely creditworthy performance.

### **3.3.2 Relevance**

A discussion of the relevance of the MAP Project towards the national development priorities is conducted under three distinct but overlapping issues – relevance to biodiversity conservation and GEF priorities; relevance to national policy; and relevance to the current context on-the-ground.

Biodiversity conservation and GEF priorities: The most significant measure of relevance is that the Project addresses the conservation of globally significant MAP species which is threatened in Lebanon. The project fully meets GEF eligibility criteria under GEF Operational Programmes #1 (Arid and Semi-Arid Zone Ecosystems), including the promotion of conservation and sustainable use of endemic species.

The project is furthermore closely linked to Operational Programme #3 (Forest Ecosystems), #4 (Mountain Ecosystems), and had contributed to GEF goals in the area of agro-biodiversity (Operational Programme #13). The project contributed to the conservation and sustainable utilisation of globally significant medicinal and aromatic plant species, arranged system for favourable situation aims at the in-situ conservation of these resources, and served to remove threats to medicinal and aromatic plants by integrating their conservation into the production process in Lebanon.

The MAP project is in line with the GEF’s second strategic priority for the Biodiversity focal area “Mainstreaming Biodiversity in Production Landscapes and Sectors” (BD-2). The project helped in integrating biodiversity conservation within the broader development agenda through mainstreaming conservation concerns within the MAP industry. The project focused on business development, influencing consumers and adding value through the chain of custody to achieve both biodiversity and productive system gains.

The project is in line with the pillars of technical and financial assistance which form the foundation from which markets can be transformed to increase biodiversity in rural landscapes. Specifically, the project will help realise four of the eight pillars identified by UNDP-GEF:

- Development of the capacity of the rural population to work on biodiversity friendly production systems;
- Scaling up of the use of environmental standards and certification to verify production systems;
- Engagement of companies and consumers in increasing the demand for biodiversity friendly products and services;
- Provision of accessible and affordable financing for micro and SMEs engaged in investments benefiting biodiversity.

National priorities: The National Biodiversity Strategy and Action Plan (NBSAP) which was endorsed by the Minister of Environment has objectives and action plan that focus on conservation, sustainable use and benefit sharing of biodiversity. Within the framework of the Enabling Activities Project, draft legislation on access and benefit sharing of biological and genetic resources was also prepared and submitted to the concerned governmental institutions for adoption.

The Lebanon State of the Environment Report, issued by the Lebanese Ministry of Environment in 2001, has given special attention to plants of economic importance, and drawn attention to the fact that overexploitation has already lead to the decline of a number of species. The National Environmental Action Programme (NEAP), which was completed in late 2005, also addressed the overuse of economically important plants, particularly medicinal and aromatic plants, and calls for promoting sustainable use. The NEAP suggested lifting the present ban of export of MAPs in order to provide economic incentives for the private sector to engage in conservation and sustainable use.

The government development strategy has given priority to the improvement of the well-being of local communities in rural areas. Agriculture contributes to food security and plays an important role in the livelihoods of local population in arid and mountainous areas. National biodiversity strategies and action plan has emphasised the need to conserve and sustain the use of agricultural agro-biodiversity, and particularly MAP diversity.

The Government of Lebanon has given high priority to poverty alleviation and address income disparities. The government tries to overcome weak agricultural productivity and a widening gap between rural and urban incomes that have led to accelerated urbanisation, environmental degradation, and social imbalance. Recently, there has been a move by the Lebanese government to realizing the need for balanced regional development in the country, accompanied by an exploration of the policies of decentralization, regional development, and expansion of the sectors forming the basis of the country's economy. UNDP in Lebanon is supporting interventions aiming at promoting balanced regional development and rural community empowerment through (1) assisting the Government in devising a strategy for balanced development on a countrywide basis; (2) advocating for changing the policy of the Government to move towards increased concentration of efforts to rural areas through increased allocation of resources from sectorial line ministries to these regions; (3) strengthening and supporting the initiatives taken by the Government in developing rural areas through supporting countrywide initiatives in health, skills training and vocational education, income diversification, etc. and (4) strengthening local community initiatives and increasing awareness at the local community level for building a social network that can impact the Government policy decisions. Integrated rural developments for alleviating poverty together with support for environmental protection are therefore among the priorities for the Government. After the hostilities in summer 2006, the government reform agenda remains not only relevant, but critical. The socio-economic impact of the war has given increased urgency to this reform agenda. “Unemployment and livelihood” and “environment” are therefore priority subjects brought forward by the Lebanese Government to the “Stockholm Conference for Lebanon’s Early Recovery” in August 2006.

Current context: As the MAP Project comes to an end, its relevance remains high since still large areas of Lebanon remain under considerable threats of unsustainable harvest of MAPs. The continuing collection of MAPs unsustainably in areas other than pilot sites still remains high and the threat of more loss of several important plant species remains even higher. Although the Project has managed to have some success in helping the Ministry of Agriculture and the local municipalities or Provincial Government to control unsustainable harvest of MAP species in four pilot sites, continued vigilance and efforts by communities after Project closure will be necessary. In this regard, the strengthened capacity and increased confidence of the local level forest rangers and cooperative members and arrangement of economic benefits through value addition to sustainably harvested MAPs and marketing through national companies and cooperatives will all play key roles in continuing conservation efforts. Moreover, the development of conservation operation guidelines, sustainable MAPs harvesting standard and

arrangement of permitting system based on resource base information helps to address the over harvesting or unsustainable harvest practices.

The Project intervenes to conserve globally important MAPs, is congruent with GEF and national priorities, and remains pertinent in the light of the current levels of threat; hence it is evaluated as Relevant.

### 3.3.3 Effectiveness and Efficiency

#### Cost-effectiveness

The UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported GEF-financed Projects (2011) defines the criteria of “efficiency” in Box 3 as:

*“The extent to which results have been delivered with the least costly resources possible; also called cost effectiveness or efficacy.”*

Overall, the Project appears to have been extremely cost-effective since it has produced all of its planned deliverables within its original GEF budget, and has also delivered some additional benefits. All levels of the Project have appeared to have taken cost-effectiveness very seriously, looking to get the best results for the money spent. The activities of component three were accomplished with far less than budgeted amount and achievement indicate no lack of quality. Overall management cost is increased than budgeted but this is due to increase in salary of the staff (in recommendation of salary survey) and also no-cost extension of project period for one year.

Biodiversity conservation by establishing Protected Areas (PA) will cost a lot of money but mainstreaming MAP conservation into the private sector helped to eliminate the recurrent costs that involve for establishment and management of PA (classical approach). In this project approach, conservation is supported by self-financing incentive systems that generate financial benefits for MAP collectors and processors who conserve. Driven by market incentives created by this project, MAP-MSEs will invest into their own business to expand and to become eligible for certification. For the MAP industry also the voluntary, participatory approach of the project is cost-effective in compare to involuntary regulatory and enforcement measures.

The project was able to achieve all expected outputs with additional achievement, and cost-effectiveness has been a priority of the implementing agency throughout. This, combined with significant levels of additional co-financing leveraged by the Project’s activities, means the overall cost-effectiveness of the Project has been extremely high, hence it is evaluated as Highly Satisfactory.

The project is able to achieve its targeted level of expected outcomes or objectives. Stakeholders were also found very satisfied from the accomplishment of the project. They view that the project achievements made significant impacts and are able to meet the objective.

The project has made changes in management processes, practices and increased level of awareness which will have long term positive impact in conservation management of the MAP species of global significance. Similarly, project delivery modalities and consistency have been efficient and have been able to contribute to GEF focal area objectives and also to national development strategies.

Project followed standard scientific methods and used qualified, experienced and dedicated technical manpower which made implementation of activities efficient and helped to achieve targets on time and with quality outcomes.

Project maintained good relation with all stakeholders and worked in close cooperation and this helped to execute activities efficiently with their cooperation and also made impact effective.

### 3.3.4 Impacts

Table 8 provides a review of the likelihood of outcomes being translated into intended impacts.

**TABLE 8: Review of outcomes to impacts at the end of project situation**

Component	Findings	Review of Outcomes to Impacts
<b>Site Level Outcomes</b>		
<b>Outcome 1:</b> Appropriate collection methods ensure a viable long-term supply of MAP raw materials of globally significant MAP species.	Resource management plan implemented in each project pilot sites. Local collectors made aware on collection methods and management. Activating local collectors and involving them in the collection and primary processing of commercially viable target species collected from project sites helped to establish local stakeholders for the conservation of MAPs of global significance.	AB: Highly Likely
<b>Outcome 2:</b> Value-added processing and product improvement result in increased value of globally significant MAPs harvested in biodiversity-friendly manner.	Project provided training on sustainable harvest, processing, and product diversification and also provided support to establish processing units in all pilot sites. 800 tons of sustainably harvested target species traded in processed form of which 5 tons came from project site. Value addition helped to increase price of the MAP products by 20%. In case of <i>Salvia</i> price increase is 40% and in case of <i>Oregano</i> it is 30%. This has encouraged local collectors to conserve species and harvest sustainably.	AA: Highly Likely
<b>Outcome 3:</b> Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation-friendly MAP products.	Supported in the development of a Ministerial Decision to establish a national permit system. MAP steering committee established and facilitating broader implementation of project objectives. Business plan for each community based enterprise. National manufacturing companies agreed to purchase sustainably harvested projects from the local cooperatives. This make collectors and local cooperatives comply with the agreement making globally significant MAP harvest sustainable.	AB: Highly Likely

Although not within the capability of the TEC to verify independently, the monitoring data collected by the Project shows verifiable improvements in the ecological status of the area and good density of regeneration of target species in the project sites observed during field visits by TEC.

Implementation of resource management plan in each project pilot site, increased awareness among the local collectors on collection methods and management. This resulted in increased ownership and assisted in the regulation of outside collectors, thereby reducing environmental stress due to reckless collection by outsiders. In the field visit, TEC observed good regeneration at the ground that conform impact of these interventions to improve status of the two globally threatened MAP species (*Salvia fruticosa* and *Origanum syriacum*).

Activating local collectors and involving them in the primary processing of commercially viable target species collected from project sites and providing economic benefits from these activities attracted locals in conservation of these species and this helped to establish local stakeholders for the conservation of MAPs of global significance.

Collection of information on status and distribution of five globally significant MAP species helped towards the process of listing them in IUCN red list and MAPs regulation legalised their conservation. It is observed that there have been measurable improvements from baseline levels in the planning and management functions of the responsible organizations that were targeted by the project.

As a result of the review of outcomes to impacts, the overall likelihood of impacts being achieved is all **Highly Likely**, hence the Project is expected to achieve all of its major global environmental objectives, and yield satisfactory global environmental benefits by conserving globally significant MAP species and its effectiveness is evaluated as **Highly Satisfactory**.

## Achievement of Project Output & Outcome

This section provides an overview of the main achievements of the Project. Considering the results achieved under each of the outcomes, and the progress toward the overall objective, the project effectiveness is rated highly satisfactory. The MAP project generated numerous significant results, meeting almost all of the planned accomplishments, and in some aspects exceeding the results. The project objective was stated as *“To integrate conservation objectives into the gathering, processing and marketing of globally significant MAPs.”*

Based on the respective indicators and overall level of progress toward the four outcomes, the outcomes rating are as follows:

**TABLE 9: Evaluation of the end of project situation as per the revised logframe**

Component	Evaluation*					
	HS	S	MS	MU	U	HU
<b>Outcome 1:</b> Appropriate collection methods ensure a viable long-term supply of MAP raw materials.						
Output 1.1 Community-based enterprises (CBE) for MAP collecting and primary processing established, or appropriate existing CBEs involved						
Integrated conservation and development planning at the landscape-level						
Output 1.2 Collectors trained in MAP identification and sustainable harvesting methods						
Output 1.3 Certification system for sustainable harvest developed and applied						
Output 1.4 Management plans for target species collection from project sites developed and implemented						
Output 1.5 Community-based resource use agreements set up and enforced						
Output 1.6 Conservation assessments according to IUCN criteria.						
<b>Outcome 2:</b> Value-added processing and product improvement result in increased value of globally significant MAPs harvested in biodiversity-friendly manner.						
Output 2.1 Manufacturing and trading companies upgraded						
Output 2.2 Locally processed MAP products branded						
Output 2.3 Innovative MAP based products developed and introduced into the market						
<b>Outcome 3:</b> Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation-friendly MAP products.						
Output 3.1 National MAP Steering committee established to facilitate roles and partnerships important to on-going sustainable management of MAP resources in Lebanon						
Output 3.2 Guidelines on sustainable harvesting practices and/or conservation strategies agreed for each target species, training modules developed and widely applied						



Component	Evaluation*					
	HS	S	MS	MU	U	HU
Output 3.3 Certification system developed, agreed and put into practice						
Output 3.4 Regulatory framework on collection, processing as well as on national and international trade developed						
Output 3.6 Consumer awareness for sustainably harvested product rose.						
<b>Outcome 4: Learning, evaluation and adaptive management achieved.</b>						
Output 4.1 Monitoring programme established						
Output 4.2 Adaptive management and strategic planning system established						
Output 4.3 Lessons learned and impact data are gathered, documented and disseminated to key internal and external audiences						
<b>Overall Project Rating</b>						

\* Note: HS = Highly satisfactory; S = Satisfactory; MS = Marginally satisfactory; MU= Marginally unsatisfactory; U = Unsatisfactory; HU = Highly unsatisfactory. Components are hyperlinked to relevant section.

The Project has incorporated biodiversity issues into the landscape conservation in four pilot sites and demonstrated successfully incentive schemes that link biodiversity conservation measures directly with economic benefits for the local communities and improved the management of biodiversity of these four sites through increased capacity of local collectors, cooperatives, government staff and local to national institutions. All Project outputs are ranked individually as **Highly Satisfactory**; hence overall the achievement of outputs and activities is evaluated as **Highly Satisfactory**. Achievement of all outputs successfully, project outcomes are also achieved as per planned, hence all outcomes of the project is also rated as **Highly Satisfactory** and overall project is also rated as **Highly Satisfactory**.

***Outcome 1: Appropriate collection methods ensure a viable long-term supply of MAP raw materials of globally significant MAP species.***

To achieve the outcome 1, project had identified five main outputs that need to be achieved. Activities and achievements of outputs are discussed below. Besides, project has also initiated IUCN red listing of target MAP species to make conservation arrangement.

***1.1 Community-based enterprises (CBE) for MAP collecting and primary processing established, or appropriate existing CBEs involved***

The project identified four pilot sites (Mrusti, Hsarat, Mejdal and Assia) based on a comprehensive and strategic field investigation process in more than 150 villages/sites and consultation with more than 200 stakeholders. It has activated two inactive cooperatives (Mejdal and Assia) and established one new cooperative in Mrusti with all requirements following legal and administrative procedures. The Project also established community based enterprises (CBEs) for MAP collection and processing in 4 project sites and equipped them with the required equipment, machinery and infrastructure to improve post-harvest and primary processing of MAPs. To enhance their capacity, 21 training sessions were organised for 370 persons on administrative and financial management, post-harvest quality control and marketing, effective and sustainable use of natural resources and running enterprises with value addition. This has added value to the products and also improved production quality and capacity of CBEs.

***1.2 Collectors trained in MAP identification and sustainable harvesting methods***

The project developed training material and tools on sustainable wild harvesting and post-harvest best practices (brochures, illustrated guideline for best practices in MAP harvesting and post harvesting, training documentary on sustainable wild harvesting of MAPs in Lebanon, illustrated identification guide for selected MAPs in Lebanon). The Project conducted 11 training sessions on the importance of MAPs and their sustainable wild harvesting for 40 participants including local collectors, customs and forest rangers which has increased their knowledge on these subjects.

***1.3 Certification system for sustainable harvest developed and applied***

The project developed and successfully implemented sustainable MAP harvesting standards based on the comprehensive field studies. Similarly, sustainable wild harvesting standards was also incorporated in the new national certification for high quality Lebanese products “*Cedar Excellence*” seal which assures quality, hygiene, social and economic criteria. The Project also assisted cooperatives of two project sites to obtain organic and wild harvesting certification for two seasons.

#### 1.4 Management plans for target species collection from project sites developed and implemented

The project developed and implemented management plans for the CBE of each pilot site to regulate the collection of both the wild MAP resources as well as other products produced by the CBE. This also helps in making harvest of plant resources sustainable.

#### 1.5 Community-based resource use agreements set up and enforced

A resource management plan was developed for each of the project pilot sites and agreed with the community institution. It is also backed by the Ministerial Decision which includes a provision on permit requirement. Community based resource management will be sustainable and cost effective.

#### 1.6 Conservation assessments and IUCN Red listing

The project generated information on distribution, status, density, sustainable harvest quantity, market price and market chain of the target species which was lacking in Lebanon. The information collected from intensive field studies following standard scientific methods helps in certification and regulation processes. With the research information and further discussion with experts and government agencies, seven target species were recommended to IUCN for listing in the Red list

The outputs has achieved all its major targets, and yielded substantial global environmental benefits, without major shortcomings. These outputs can be presented as “good practice” and is rated as **Highly Satisfactory**. Project has accomplished all activities of outcome that were required to make harvest of MAP species sustainable for ensuring a viable long-term supply of MAP raw material, hence the **outcome achievement is rated as Highly Satisfactory**.

### ***Outcome 2: Value-added processing and product improvement result in increased value of Globally significant MAPs harvested in biodiversity-friendly manner.***

To achieve the outcome 2, project had identified three outputs that need to be achieved. Activities and achievements of outputs are discussed below:

#### Output 2.1: Manufacturing and trading companies upgraded

The project conducted market studies to identify buyers at the national and international markets and established communication with 32 national companies and 100 international companies. Nine of these national companies expressed interest to purchase products from the project pilot sites and the link was established with CBE. The project had also provided assistance to national manufacturing companies to enhance their technical capacity in the extraction of essential oils from MAP species. It assisted to develop a unique brand “*Nabta*” for a new line of body and hair care products made from sustainably harvested MAPs for a national manufacturing company “*Khan Al Saboun*” that purchase sage from the pilot sites of the project.

To generate awareness among private sectors and their cooperation for conservation of MAPs, the project organized a press conference on the role of the private sector in promoting sustainable wild harvesting of medicinal and aromatic plants.

Project initiated a long-term alliance between a well-established and successful national marketing cooperative with a long history of cooperation and support with a large network of national cooperatives across Lebanon. The alliance helped in accessing and enhancing market access for the local products from the CBEs (established by the project) to the national and international markets. The cooperative provided

guidance and support to enhance the CBE's product image, develop and implement marketing strategies as well as improve logistical and financial issues related to marketing and sales.

These activities helped to expand the market for the community products and strengthened them to compete in the market, increased price through certification and improved quality, better marketing and sales techniques, improved collection methods, improved postharvest and processing practices and linkage with national markets.

### 2.2 Locally processed MAP products branded

The project developed a cohesive brand "*Lebanese VILLAGE products*" which guarantee 100 % natural products, quality controlled, traditionally made by local communities, preservatives and additives free and made in Lebanon. The brand name is owned by UNDP and the rights to use are given to Atayeb Al Rif national cooperative through signing MoU. The unified brand name was intended to facilitate the CBE's transition into the market by incorporating sustainably harvested MAP products into a large production line with existing markets channels.

### 2.3 Innovative MAP based products developed and introduced into the market

The project helped to conduct biological, chemical and physical testing of MAPs to identify potential marketing challenges. Similarly, it also analyzed the essential oil of MAP species at different collection seasons/periods and regions in order to provide accurate information to the market. The project has developed and introduced 8 products (dried pure oregano from Assia, dried pure oregano from Mrusti, dried Zaatar mix from Asia, dried sage leaves from Hsarat, dried sage leaves from Mejdel, infusion bags of sage, infusion bags of oregano and ready to eat single serving of "Zaatar" sachets) into the market. Study of price and quantity of Oregano and Sage sold by the CBEs and collectors before and after project intervention and comparisons of these information indicated that there has been an average increase in profit by 20% (40% in case of Salvia and 30% in case of Oregano).

The outcome of increasing value of MAPs of Global significance harvested in biodiversity-friendly manner through value-added processing and product improvement is achieved successfully and the outcome is rated as **Highly Satisfactory**. Similarly, outputs under this outcome have achieved all its major targets, and yielded substantial global environmental benefits by establishing local stakeholders for conservation of MAP species of global significance, without major shortcomings. The outputs can be presented as "good practice", hence is evaluated as **Highly Satisfactory**.

### ***Outcome 3: Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation-friendly MAP products***

To achieve the outcome 3, project had identified five main outputs that need to be achieved. Activities and achievements of outputs are discussed below. Besides, project has also made some additional achievements that also help to achieve outcome 3.

#### 3.1 National MAP Association established to facilitate roles and partnerships important to ongoing sustainable management of MAP resources in Lebanon

The project provided support to the national MAP steering committee based at the Ministry of Agriculture. The committee has representation from the private sector also. Since MAP steering committee will be part of MoA, this will remain beyond project life. Levels of awareness among staffs of the ministry were increased after training from this project and were found very much committed and they also assured that there will not be any risk of sustainability of the committee. Project personnel attended all meetings of the committee. Utilizing experiences, the project supported in developing conservation operational guidelines for MAPs in Lebanon. The project also developed a categorized list of the most important wild Lebanese medicinal and aromatic plants.

### 3.2 Guidelines on sustainable harvesting practices and/or conservation strategies agreed for each target species, training modules developed and widely applied

The project developed and implemented theoretical and practical training sessions on sustainable harvesting of MAPs from the wild to help implementation of the new Ministerial Decision for management and sustainability of MAPs. Training had 7 sessions and was attended by 250 participants from Ministry of Agriculture staffs from all regions of Lebanon (forest rangers, extension service engineers, export and import departments) and Ministry of Finance staffs (Department of customs staff). Similarly, another 2 session of similar training was conducted for 20 participants from Customs department and MoA's export and import department staff on sustainable wild harvesting of MAPs and the implementation of the new Ministerial Decision for sage and oregano and this had 2 sessions.

The project has developed and implemented a comprehensive resource assessment and monitoring programs at the four pilot sites to provide sound, technical and indicative standards for sustainable wild harvesting to feed certification and regulation.

The project has also developed practical, quick and easily adopted methodologies and tools for assessing the productivity (kg) of *Salvia fruticosa* "Kaseen" and *Origanum syriacum* "Zaatar" to ensure the easy, effective and proper implementation of the new permit system for sustainable harvesting.

### 3.3 Certification system developed, agreed and enforced

Already explained above in 1.3.

### 3.4 Regulatory framework on collection, processing as well as on national and international trade developed

The project assessed gaps in the institutional framework of the MAP related sector. To address the gap and support conservation of MAPs, project helped to develop and endorse Ministerial decision for management and sustainability of MAPs. Similarly to support implementation, it developed training packages and conducted trainings for custom officials and other staffs from MoA. It also conducted monitoring of the first implementation season of the new Ministerial Decision by following up with forest rangers, collectors, traders and customs in collaboration with MoA. The monitoring helped the project and MoA identify gaps, challenges, and technical problems such as miscalculation of the allowed harvestable yield which will guide the modification of the Ministerial Decision in the medium term as well as better orient the draft MAP decree.

The project also provided technical input to modify the national standard (Libnor) for sage and participated in all technical committee meetings which led to the successful modification and adoption of a new standard. The standard will provide more accurate, comprehensive and useful standards to meet both the diverse market demands as well as the health, safety and authenticity concerns of consumers. The national standard will complement the marketing and regulation initiatives undertaken by the project by providing specific standards for different categories of "zaatar" thereby allowing for a well-justified market niche for high quality production characterized by artisanal and local production versus the commercial production. The national standard will provide the customs and MoA import /export staff with an effective and useful tool to monitor and control the import, export and national consumption of "Zaatar" which currently is very challenging without clear and effective standards. Furthermore, Libnor will propose the new Zaatar standard as a regional codex standard.

### 3.5 Consumer awareness for sustainably harvested products rose

Sage and oregano products from the four-project pilot sites were exhibited in various local and international expositions targeting different audience. The exhibition sites, exhibition period and approximate visitors are listed below:

- City Mall, Lebanon 7 days general public, approximately 500 people
- American University of Beirut, Lebanon ,1 day, students, approximately 250 people
- American University of Beirut, Lebanon, 1 day, university staff, approximately 250 people

- France Au Liban, Paris, 3 days, French and Lebanese consumers, approximately 750 people
- Horeca, Lebanon 4 days, professionals (restaurants, food safety, traders national, regional and international NGO), approximately 1200 people
- Garden Show, Lebanon 4 days, families, approximately 350 people
- City Mall, Lebanon, 3 days, general public, approximately 100 people
- ABC mall Christmas fair, Lebanon, 30 days, general public, approximately 1000 people

*Additional Achievements:* Project established seven oregano cultivation demonstration plots across Lebanon. The cultivation plots served as good examples of cultivating a non-traditional new crop in areas where either oregano does not exist in the wild or the quantity in the wild is insufficient to be a commercially viable source of living. At present market scenario, cultivation may not completely replace wild harvesting but it will complement wild harvesting reducing destructive pressure on the wild species. This also helped to study viability of this species in various geographic and climatic conditions. These studies were participatory which involved farmers as well as government staffs. Farmers were mobilized to record information on cost, revenue, irrigation, weeding, pest management, diseases etc. The project team together with Ministry staff made regular visits to monitor plots sites. This enhanced technical capacity of the Ministry staff which could help to expand such activities in other areas.

Project is able to achieve target outcome of strengthening supply chain framework for sustainable harvest of globally significant MAP species and promoted awareness for conservation-friendly MAP products, hence outcome is rated as **Highly Satisfactory**. Similarly, The outputs under this outcome have achieved its all major targets, and yielded substantial global environmental benefits by conserving MAP species of global significance through improvement and strengthening supply value chain and raising awareness. The outputs can be presented as “good practice”, hence is evaluated as **Highly Satisfactory**.

#### ***Outcome 4: Learning, evaluation, and adaptive management***

To achieve the outcome 4, project had identified three main outputs that need to be achieved. Activities and achievements of outputs are discussed below:

##### ***4.1 Monitoring programme established***

The project established regular and effective collaboration with the executing entity (Lebanese Agriculture Research Institute) and the Ministry of Agriculture (main government entity responsible for regulating the MAP sector). It had joint field monitoring programs and also conducted regular annual project broad meetings to evaluate achievement and constraints and to provide feedback to the implementing team.

##### ***4.2 Adaptive management and strategic planning system established***

As already mentioned, the project monitored the impact, adoption, success and challenges of the new Ministerial Decision on different stakeholders (Ministry of Agriculture, collectors, middlemen, trainers, traders and customs) in order to provide accurate field based suggestions and recommendations for required adaptive management in the regulation of the MAP sector.

Project conducted midterm evaluation (MTE) and recommendations were taken into consideration in an adaptive management approach to orient the project’s activities in the remaining implementation phase.

##### ***4.3 Lessons learned and impact data are gathered, documented and disseminated to key internal and external audiences***

- All project outputs / deliverables uploaded on websites for wide and easy access
- Short documentary on project impact in Mujdel is developed and uploaded on You Tube.



- Documentary on training on sustainable wild harvesting of MAPs in Lebanon and implementation of the Ministerial Decision regarding wild harvesting, transport and trade of sage and oregano is developed and uploaded on websites and YouTube.
- Media coverage was made in 1 TV program, 3 radio interviews, 3 magazine articles and 10 newspaper articles.
- Conducted an exchange visit with a newly initiated UNDP project on Morocco on MAPs. The exchange involved technical issues pertaining to the development and implementation of field assessments and surveys undertaken in the Lebanon project as well as overall project activities, results and lessons learned.
- The methodologies developed and implemented by the project for the national survey of the target species were highly evaluated by IUCN for its scientific vigor, accuracy and precision.

The project management aspects have been dealt with elsewhere in the report, e.g. implementation, adaptive management, financial, and monitoring and evaluation and implementation has been achieved to the highest standards. The project used 12 indicators designed to assess progress of implementation of each of the activities specified in the Project's logical framework and has reported annually to UNDP-GEF using standard (globally applicable) tracking tools to measure site-level management effectiveness.

Accomplishment of these outputs has contributed to achieve outcome of arranging adaptive management, evaluation system and learning opportunities by knowledge management. The outcome can be presented as "good practice", hence is evaluated as **Highly Satisfactory**. Accomplishing these activities successfully, project has achieved target outcome of arranging Learning, evaluation, and adaptive management, hence this outcome is rated as **Highly Satisfactory**.

### 3.3.5 Country Ownership

LARI took the responsibility of project execution and LARI's involvement in the project was on behalf of Government of Lebanon, therefore Government has ownership in this project. The project outputs identification and project design was carried out by involving relevant government agencies. The results of the project complemented government's development priorities. Some of the government strategies, programs and plans that were complemented by this project are described below:

After the hostilities in summer 2006, the government reform agenda remains not only relevant, but critical. The socio-economic impact of the war has given increased urgency to this reform agenda. "Unemployment and livelihood" and "environment" are therefore priority subjects brought forward by the Lebanese Government to the "Stockholm Conference for Lebanon's Early Recovery" in August 2006.

The government development strategy has also given priority to the improvement of the well-being of local communities in rural areas. Agriculture contributes to food security and plays an important role in the livelihoods of local population in arid and mountainous areas. National biodiversity strategies and action plan has emphasised the need to conserve and sustain the use of agricultural agro-biodiversity, and particularly MAP diversity.

Lebanese Ministry of Environment has given special attention to plants of economic importance, and drawn attention to the fact that overexploitation has already lead to the decline of a number of species and this is stated in the Lebanon State of the Environment Report 2001 and 2010. National Biodiversity Strategy and Action Plan (NBSAP) of Lebanon focus on conservation, sustainable use and benefit sharing of biological and genetic resources. Similarly, the National Environmental Action Programme (NEAP), which was completed in late 2005, also addressed the overuse of economically important plants, particularly medicinal and aromatic plants, and calls for promoting sustainable use. NEAP suggests considering a lift of the present ban of export of MAPs in order to provide economic incentives for the private sector to engage in conservation and sustainable use.



The ultimate aim of the programme is also to incorporate environment and natural resources management into national poverty reduction strategies and key development frameworks. The contribution of biodiversity and ecosystem services to food security, health, livelihoods and reduced vulnerability to natural disasters is factored into national planning for the achievement of development goals, including safeguards to protect these resources. This project will therefore form an additional building block to put together conservation and social development within a national applicable scheme for better-integrated rural development. Finally, there is in Lebanon widespread interest among both health care professionals and the public at large in perpetuating the important health care role of medicinal plants. Moreover, development of guidelines on sustainable harvesting practices and conservation strategies will help to safeguard species and make harvest/supply sustainable for the dual benefit of conservation and economic development.

Since much of Lebanon's rural economy was severely impacted by the destruction as a result of the 2006 conflict, the recovery of rural livelihoods and access to markets is a national priority. This project is fully consistent with the framework of initiatives for early recovery, led by UNDP at the request of the Government.

Finally, since the ultimately the project will be safeguarding the environment and natural resources in and around the NBC, the project outcomes will bring Lebanon a step closer towards achieving MDG Goal 7: Ensure environmental sustainability.

### **3.3.6 Mainstreaming**

The mainstreaming of Biodiversity Management into Medicinal and Aromatic Plants Production Processes by this project contribute to income generation to poverty eradication, improve resource management through communities involvement, improve regeneration of target species, empower women and also it is inline of the UNDP country programme and country program action plan (CPAP).

As per project document, the project development process involved analysis of various options of management and based on that mainstreaming sustainable-use into the sector that most directly threatens the target biodiversity values has been selected as the most effective framework for improving the situation. The project's mainstreaming efforts was focused on the MAP industry, specifically MAP harvesting, processing and marketing. The mainstreaming approach to MAP conservation was relevant as people had a clear vested interest due to the direct economic benefits linked to it.

The basic idea of the project is that less destructive harvests together with income generated by the MAP business for local people will maintain population, species and ecosystem diversity. Hence, this mainstreaming approach has the potentiality to impact both on biodiversity as well as on the sustainable livelihoods and sustainable human development of the vulnerable groups involved in this industry. It is believed that the sustainable harvest is the best conservation strategy for most of the wild-harvested species and their habitats, given their current and potential contributions to local economies and their greater value to harvesters over the long term.

The fundamental principle of the project was to trigger conservation and sustainable use of MAPs through adding value to MAP produces. Value-addition will increase income that encourages locals to conserve these species and also the investors to invest in this sector. Linking provision of certification and the establishment of sustainable harvest practices through capacity enhancement will strengthen conservation and sustainable utilisation. The project relied on the market force for conservation and sustainable livelihood rather than other options like strict control or land use planning.

The private sector was the main entry point for project interventions. Mainstreaming sustainable use concerns into the MAP industry, which is largely informal in Lebanon, led to a further developed and

better structured industry with enhanced responsibility for conserving its own resource-base, and expected to secure the income of local people.

### 3.3.7 Sustainability

The evaluation of the sustainability of this Project is most likely to be sustainable beyond the project life. Some risk could be suspected in relation to political uncertainty as priority of new government may be different and these initiatives will not get sufficient priority. As will be seen below, the sustainability at the Project level is actually very strong and it is difficult to see what more those involved could have done.

Financial: The outlook for the long-term financial sustainability of the project appears unusually good but it is connected to the efficiency of the national cooperatives and other companies. LARI mentioned that they are committed to continue their support to these project activities. Similarly, the mayor of Assia mentioned that they have applied to different donors for generating financial support to continue and expand the project activities and also assure that they will also allocate some money from the municipality for these activities. Likewise nature reserve of Mrusti also assured to continue support to the project activities.

Socio-economic: The social sustainability of the project appears very promising. The awareness-raising activities have certainly been beneficial and undoubtedly changed people's minds at the community level as regards sustainable harvest of MAPs. The empowerment of local communities through agreeing to sustainable harvest and management of MAPs has been one of the lynchpins upon which all behavioural change has occurred. For many others, this has been matched by provision of economic benefits directly linked to MAP species conservation measures and these incentives are particularly strong. It has contributed to the economic well-being of many villagers and as a result enjoys a very wide support base which is being used to help in replicating the schemes in other villages. As a result, the socio-economic sustainability is adjudged to be **Likely**.

Institutional and Governance: The institutional sustainability of the Project is good. Those agencies directly involved appear strongly committed towards its aims and the impacts that it has had. Clearly, the decision to route all activities directly through existing Government institutions has paid dividends in this respect, and the Mayors of the pilot sites and Nature reserve official of Mrusti site are not only extremely supportive of what has been accomplished but also are strong advocates of its achievements. A further corollary of this strategy has been that all local cooperatives and collectors have been significantly strengthened and are now able to play a stronger role in future conservation and sustainable use initiatives. Moreover, development and implementation of conservation regulation and enhanced capacity of the Ministry of Agriculture regarding MAPs conservation will also assures sustainability of the project outcomes. Therefore, the institutional sustainability is believed to be **Likely**.

Environmental: Environment sustainability is one of the important elements of the project strategy. The project achievement will directly strengthen sustainability of biodiversity and ecological resources of Lebanon. The capacity development, policy formulation, economic incentives to conserve MAP species and strengthening of implementation of conservation measures will make project outcomes sustainable. There are no environmental risks associated with the sustainability of this Project, hence the environmental sustainability is deemed to be **Likely**.

The overall sustainability of the regional component is ranked as **Likely**.

### 3.3.8 Catalytic Role and Replication

Discussion of replication in relation to the MAP Project has to be undertaken at two levels – the macro-level of replicating it as a landscape-scale project to cover wide area, and the micro-level with regard to replication of its products and site-based interventions. MAP has shown that the landscape-scale approach can work in Lebanon and could be replicated in other parts of the country. The integrated nature of the policy-level mainstreaming, awareness generating on importance of MAP, sustainable harvest method and product development and marketing for economic incentives to change people's behaviour in favour of biodiversity conservation, capacity building of government agency, increased enforcement, research and monitoring provide a solid model of success that it is hoped may influence future project design in the country.

At the micro-level, MAP's performance is good. Most outputs of the Project fall under the middle two levels of catalytic role, i.e. demonstration and replication. Examples of the former (the lower of the two) include the economic incentives for MAP conservation; and the process of mainstreaming biodiversity into National Development Plans.

Since project activities is piloted in four sites with focus on only two species, it need to be replicated in surround areas of the pilot sites and also other provinces of Lebanon including other plant species. Project studied all target species and process for listing in IUCN is already initiated. Also project contributed in developing legislation and trained staffs from the enforcement agency. These will help strengthen conservation efforts and also make replication easier.

Government agencies, private sector and also municipality chief expressed interest to replicate lessons from this project in wide areas and municipality of Assia also mention that they are planning to allocate fund from their regular budget and also applied to various donors for fund to expand and replicate such activities.

The learning from this project could be useful for other part of Lebanon, Middle East and elsewhere with similar situations. Hence for the benefit of projects and for replication in other areas, project disseminated lessons learned to a wide audience through various means like report distribution, information sharing through different network, shared with other GEF projects, international networks like IUCN Medicinal Plants Specialist Group and the FAO through the Non-wood News webpage.

The "International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants" (ISSC-MAP), currently is being developed jointly by the World Wide Fund for Nature (WWF), the TRAFFIC network, the German Agency for Nature Conservation and IUCN–The World Conservation Union. Information collected from piloting of sustainable harvesting was shared with them for contributing in developing framework of principles and criteria for above mentioned standardization of sustainable wild collection and management of MAPs at the global level.

### 3.3.9 Ratings

104. As per UNDP and GEF TE guidelines, the TE ratings are consolidated in Table 10 below.

**Table 10: Terminal Evaluation's Rating Project Performance**

Criterion	Comments	Rating
<b>Monitoring and Evaluation</b>		
Overall quality of M&E	The design of M&E was up to standard with a fully itemised and cost Plan included in the Project Document covering all the various M&E steps including the allocation of responsibilities.	Highly Satisfactory
M&E design at project start up	As above.	Highly Satisfactory

M&E Plan Implementation	M&E implementation has been standard, with excellent progress monitoring and strong internal activity monitoring. The impact monitoring, normally the weak point of any project's M&E, is particularly noteworthy for its quality and effectiveness and has been used to influence management decisions.	Highly Satisfactory
<b>IA &amp; EA Execution:</b>		
Overall Quality of Project Implementation/Execution	The Project has been well-organised and well-managed throughout providing products of the highest technical quality on time and within budget, while responding effectively to a range of internal and external challenges through good adaptive management.	Highly Satisfactory
Implementing Agency Execution	LARI assembled a coherent, well-integrated team of the high calibre which exhibited a real drive to ensure their targets were met, a demand for high technical quality in all that they did, and a desire to communicate their knowledge to others.	Highly Satisfactory
Executing Agency Execution	UNDP have provided an adequate level of supervision and backstopping to the Project, and its performance has benefitted as a direct result.	Satisfactory
<b>Outcomes</b>		
Overall Quality of Project Outcomes	Overall quality is of the high order.	Highly Satisfactory
Relevance	The Project intervenes to conserve globally important plant species, is congruent with GEF and national priorities, and remains pertinent in the light of the current levels of threat	Relevant
Effectiveness	A review of outcomes to impacts (ROtI) shows the overall likelihood of impacts being achieved is Highly Likely.	Highly Satisfactory
Cost-effectiveness (Efficiency)	Project management costs were trimmed to 55% of those originally budgeted, and cost-effectiveness has been a priority of the implementing partner- LARI, throughout, amongst their priorities. This, combined with significant levels of additional co-financing leveraged by the Project's activities, means the overall cost-effectiveness of the Project has been extremely high	Highly Satisfactory
<b>Sustainability:</b>		
Overall likelihood of risks to Sustainability	There are some risks but since stakeholders are aware, strengthened and committed these risks will not take place.	Unlikely
Financial resources	Good – LARI, Ministry of Agriculture and local political bodies like municipalities show long-term commitment to the area and there is evidence of considerable technical, policy and some financial commitments from the Government.	Likely
Socio-economic	Solid – beneficiaries show increased awareness and changed behaviours linked to collection and utilisation.	Likely

Institutional framework and governance	Institutionally good through strengthened capacity and support from senior staff in the LARI. Political transition poses little risks.	Unlikely
Environmental	No risks evident.	Likely
<b>Impact:</b>		
Environmental Status Improvement	Status of 2 globally-threatened MAP species improved as good regeneration taking place at ground; Information on status and distribution of other important MAP was also satisfactory. Similarly, MAPs regulation legalised their conservation.	Significant
Environmental Stress Reduction	Collection of target species by outsiders stopped. Sustainable harvest method assured regeneration. Improved management and arrangement of local guardianship for conservation of these species secured these species from unsustainable and illegal harvest practices.	Minimal
Progress towards stress/status change	Generally very good – decrease in illegal collection by outsiders, improved sustainable harvest practices, local protection arrangements, increased interest of the government bodies, local political bodies and cooperatives, increased awareness level of collectors.	Significant
<b>Overall Project Results</b>		<b>Highly Satisfactory</b>

## 4 Conclusion, Recommendation & Lessons Learned

### 4.1 Conclusion

The Mainstreaming MAPs Project has been well designed, and well- managed and implemented throughout. Despite difficulties in the beginning of the project, the team has managed to deliver a series of interventions that have significantly reduced the threats to two threatened MAP species namely *Salvia fruticosa* and *Origanum syriacum* and by generating information on all seven target species initiated process to include them in the IUCN Red list for conservation arrangement. The Project has been underpinned by good science and a technical approach of the highest calibre throughout. It has incorporated biodiversity issues into the landscape-level planning process in four pilot sites namely Hsarat, Assia, Mijdil and Mrustri; and improved the conservation situation by generating a local concern on the MAP species.

Project is able to accomplish all activities to meet the targeted results. Project established 4 community based enterprises though target was 5. These 4 enterprises covers target audiences of the four pilot sites so there was not need to 5 enterprises and the achievement could be considered completed.

Project contribution in development and testing of legislations, conservation operational guidelines, and also developed database on MAPs, designed manuals and training materials, harvesting standard set and identified institutional gaps for improvement. Since it is only tested in four pilot sites, it should be replicated in other important MAP diversity hotspots. The experience from this project will be valuable assets to expand such activities at the national level covering all areas of the country.

## **4.2 Corrective Actions for the Design, Implementation, Monitoring and Evaluation of the Project**

Not all species has the same level of market value. In this project also, of the seven target species only two were chosen for value addition and marketing because others didn't had good market price to provide economic incentives for local communities to conserve those species. Hence conservation of species with less market value needs different approach. As for example, in the area with tourism potential, ban on collection of such species could be imposed and locals could be compensated from tourism revenue or provide income generation opportunity from tourism. Hence, project should identify local advantage (potential areas) to develop alternatives to income from MAPs of conservation values.

## **4.3 Actions to follow up or reinforce Initial Benefits from the Project**

Government may not be able to allocate sufficient budget for monitoring and to replicate this model to rest of the country so support from various donors may be needed. Involving private sector could also be one option to replicate these activities in other areas.

Economic incentives are the main attraction to generate local support in the conservation of important MAP species. Project by adding value to product and linking with market contributed to increase some benefit but for long term sustainability of conservation efforts present level of return is not sufficient to maintain attraction of locals. Hence further effort is needed to increase return from local MAP products.

(Also see in Catalytic role and Replication, see section 3.3.8)

This project is piloted with only two species but conservation effort is needed for several other important species also. Project generated information on remaining 5 target species also which could be useful to arrange conservation management while replicating. To include all species TEC suggest broader landscape level approach to cover many species and their habitat.

This project has also generated information on the cultivation of the two species. Information from these experiments could be used to develop strategy for encouraging cultivation in farming these species which could help to increase supply and decrease pressure on the wild resource base.

## **4.4 Proposal for Future Directions underlying Main Objectives**

There are several MAP species which are very important from the conservation aspect. The present market approach or economic incentive approach may not be suitable to generate local supports for their conservation due to low market value of them. Due to low market value, these species are collected in large quantity that imposes threat to these species. For immediate rescue of those species, imposing strict protection would be suitable option. Latter by discovering new options for economic development of these species or developing alternative use of those areas (e.g. tourism or PES) again conservation could be switched to participatory approach.

This project has been successfully piloted in four sites of Lebanon. This assures conservation of MAPs in these four sites but rest of the part of Lebanon still has problems. Without addressing country at the national level, main goal will not be fulfilled. Hence, the experience and lessons learned from this project should be utilised to conserve MAPs of global significance in all part of Lebanon i.e. replication is needed for broader landscape level conservation of these species. The regulations developed and issued with the help of this project will contribute in conservation of MAPs of Lebanon but effective implementation in all parts need capacity enhancement of communities, local organisations and local government institutions.

## **4.5 Best and Worst Practices in addressing Issues relating to Relevance, Performance and Success**



Lessons learned are arranged under project-related headings. Further discussion and key points for future projects have been added in this section. Some of the lessons learned listed below have arisen from discussions with persons interviewed during the evaluation and the TEC thanks them for their insights.

### ***Strategic***

*Community organisations lack market knowledge so support to link them with the players (companies) of the market will help to provide economic incentives to communities and there by generate their cooperation for conservation.*

Lack of market knowledge has been seen as drawbacks in many projects limiting communities from getting sufficient benefits. Similarly, lack of knowledge, literacy and weak investment ability force them to accept available incompetent market with limited benefits. Generating knowledge on various markets and providing knowledge to locals helps to link them with better market and increase benefits from their products. Moreover, linking them with national cooperatives also helps to bring their product to better market. Increased return for their products encourages communities to conserve their resources.

*Economic incentives to achieve conservation goals*

Before the project intervention, the profit maximisation was sought through high volume, low quality trade. The Project intervention helped to increase economic incentives for the local collectors and community members by adding value to their product and linking their product to better markets. To add value, the project provided training on processing and product diversification which increased collector's economic return. Likewise to secure market for their products it was linked to national and international market through national cooperatives. Economic incentives with increased awareness and sustainable harvest knowledge assure conservation of MAPs.

### ***Design***

*Working directly through existing government structures brings dividends*

The Project chose to work directly through government institutions (LARI) rather than setting up parallel implementation structures. This decision has proved very successful not only in empowering government by providing experience and training, but also in developing effective government “ownership”, engagement, participation and motivation, thereby promoting long-term sustainability of the Project's achievements.

*Designing a project linking various institutions from grassroots level institutions, government agencies, local authorities and private sector generates huge benefits for sustainability, and through the synergies developed provides the intervention with much greater effectiveness than that which can be achieved by stand-alone projects.*

The Project chose to work with various institutions of different levels and local communities. This helped in empowering the these institutions by providing experience and training in a well-funded and well-equipped environment and also in developing effective “ownership”, engagement, participation and motivation, thereby promoting long-term sustainability of the Project's achievements. It also helped to generate local guardianship (from community organisations or groups, local authorities and private sectors) that made project implementation efficient and effective.

### ***Project Management***

*Constant contacts with communities are vital to community-based natural resource management projects.* Good communication and regular communication in relation to project activities with the communities helps to successful, community-based projects as it built trust and motivation of the local communities targeted. To achieve this, the quality and commitment of those employed as site engineer and assistants are key attributes of a project. This Project has been blessed with particularly impressive site engineers,

but what the TEC believes to be the most important factor has been the almost constant contact that they have had with the communities throughout the Project's lifetime by deploying people on the ground for long periods of time. This frequency of contact has undoubtedly enabled the Project to build high levels of trust, capacity, and motivation which in turn has facilitated the change in people's mind-sets and behaviours and brought about the success of the three incentive schemes.

*Deployments of technical experts makes program technically sound.*

Besides, two site agro-engineers, the project also hired senior agriculture/biodiversity experts (Dr. Jihad R. Noun and Dr Leamann) to provide technical support to the project. The MAP Project use of multiple NGOs in the same locality has brought the best technical expertise to bear on local issues even at the slight costs incurred through increased complexity of approach. As a result, technical implementation has gone smoothly and brought about successful results, generally thought to be of a higher standard than had the more pragmatic and more easily managed alternative of using a single organisation to cover all issues in a given locality been applied.

## Annex I: Terms of Reference for Terminal Evaluation

### INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of the **Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants Production Processes (PIMS 4008)**.

The essentials of the project to be evaluated are as follows:

### PROJECT SUMMARY TABLE

Project Title:	Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants Production Processes in Lebanon			
GEF Project ID:	3418		<i>at endorsement (Million US\$)</i>	<i>at completion (Million US\$)</i>
UNDP Project ID:	PIMS 4008	GEF financing:	980,000	980,000
Country:	Lebanon	LARI IN KIND:	285,000	285,000
Region:	Arab States	UNDP IN KIND :	515,000	515,000
Focal Area:	Biodiversity	UNDP cash:	150,000	150,000
FA Objectives, (OP/SP):	Mainstreaming biodiversity (SO2)	Total co-financing:	950,000	950,000
Executing Agency:	Lebanese Agriculture Research Institute	Total Project Cost:	1,130,000	1,130,000
Other Partners involved:	Ministry of Agriculture	ProDoc Signature (date project began):		August 15 2008
		(Operational) Closing Date:	Proposed: June 25 2011-	Actual:

### OBJECTIVE AND SCOPE

The project was designed to address the security of Lebanon's high levels of medicinal and aromatic plant (MAP) diversity (around 365 MAPs are found and utilized in Lebanon, 47 of which are endemic to the region), which are threatened by destructive harvesting and overharvesting. Wild stocks supply approximately 98% of the MAP market and the current practices are threatening the market's supply base as well as globally significant biodiversity values. The project seeks to address this problem by developing MAPs as a resource-base for local livelihood and national development. The project aims to integrate conservation objectives into the gathering, processing and marketing of globally significant MAPs. The hypothesis is that non-destructive harvests, together with income generated by MAP business opportunities for local people, will maintain the wild stocks of globally significant endemic MAP species that are commercially traded and threatened by current harvesting practices.

The overall **project goal** is to secure globally significant Medicinal and Aromatic Plants (MAPs) in Lebanon, which form a resource-base for local livelihood and national development. The **project objective** is to integrate conservation objectives into the gathering, processing and marketing of globally significant MAPs. The project targets seven MAP species: *Salvia fruticosa*, *Origanum syriacum*, *Cyclotricium origanifolium*, *Micromeria libanotica*, *Viola Libanotica*, *Alcea damascene* and *Origanum ehrenbergii*. The project aims to accomplish its objective through producing the following three main outcomes:

**Outcome 1:** Appropriate collection methods ensure a viable long-term supply of MAP raw materials;

**Outcome 2:** Value-added processing and product improvement result in increased value of globally significant MAPs harvested in biodiversity-friendly manner;

**Outcome 3:** Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation-friendly MAP products.

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

## EVALUATION APPROACH AND METHOD

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An overall approach and method<sup>5</sup> for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of **relevance, effectiveness, efficiency, sustainability, and impact**, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. A set of questions covering each of these criteria have been drafted and are included with this TOR ([Annex C](#)). The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region and key stakeholders. The evaluator is expected to conduct a field mission to Lebanon, including the following project sites: Mejdal-Akkar; Assia-Batroun; Hsarat-Jbiel, and Mrusti-Chouf. Interviews will be held with the following organizations and individuals at a minimum: Director General, Lebanese Agriculture Research Institute (LARI), representative from the Ministry of Agriculture, local stakeholders in the pilot sites, national biodiversity expert, LibanCert expert, Atayeb El Rif cooperative, and UNDP staff.

The evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in [Annex B](#) of this Terms of Reference.

## EVALUATION CRITERIA & RATINGS

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An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see [Annex A](#)), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: **relevance, effectiveness, efficiency, sustainability and impact**. Ratings must be provided on the following performance criteria. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in [Annex D](#).

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<sup>5</sup> For additional information on methods, see the [Handbook on Planning, Monitoring and Evaluating for Development Results](#), Chapter 7, pg. 163

<b>Evaluation Ratings:</b>			
<b>1. Monitoring and Evaluation</b>	<i>rating</i>	<b>2. IA&amp; EA Execution</b>	<i>Rating</i>
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
<b>3. Assessment of Outcomes</b>	<i>rating</i>	<b>4. Sustainability</b>	<i>Rating</i>
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental :	
		Overall likelihood of sustainability:	

## PROJECT FINANCE / COFINANCE

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data in order to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	UNDP own financing (mill. US\$)		Government (mill. US\$)		Partner Agency (mill. US\$)		Total (mill. US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants								
Loans/Concessions								
• In-kind support								
• Other								
Totals								

## MAINSTREAMING

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender.

## IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status, b) verifiable reductions in stress on ecological systems, and/or c) demonstrated progress towards these impact achievements.<sup>6</sup>

<sup>6</sup>A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: [ROTI Handbook 2009](#)

## CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of **conclusions, recommendations** and **lessons**.

## IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in Lebanon. The UNDP CO will contract the evaluators and ensure the timely provision of the Contract (per diems and travel arrangements (air ticket) to Lebanon are the responsibility of the evaluator and to be included in the offer). The UNDP CO and Project Team will ensure the travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the Evaluators team to set up stakeholder interviews, arrange field visits, coordinate with the Government etc.

## EVALUATION TIMEFRAME

The total duration of the evaluation will be 25 days according to the following plan:

Activity	Timing	Completion Date
<b>Preparation</b>	4 days	<i>17 May 2013</i>
<b>Evaluation Mission</b>	9 days	<i>30 May 2013</i>
<b>Draft Evaluation Report</b>	10 days	<i>12 June 2013</i>
<b>Final Report</b>	2 days	<i>28 June 2013</i>

## EVALUATION DELIVERABLES

The evaluation team is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
<b>Inception Report</b>	Evaluator provides clarifications on timing and method	No later than 2 weeks before the evaluation mission.	Evaluator submits to UNDP CO
<b>Presentation</b>	Initial Findings	End of evaluation mission	To project management, UNDP CO
<b>Draft Final Report</b>	Full report, (per annexed template) with annexes	Within 3 weeks of the evaluation mission	Sent to CO, reviewed by RTA, PCU, GEF OFPs
<b>Final Report*</b>	Revised report	Within 1 week of receiving UNDP comments on draft	Sent to CO for uploading to UNDP ERC.

\*When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.

## TEAM COMPOSITION

The evaluation team will be composed of *1 international evaluator*. The consultant shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The evaluator selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.



The Team member must present the following qualifications:

- Minimum 10 years of relevant professional experience
- A minimum of a Masters degree in natural resource management or other related field
- Knowledge of UNDP and GEF
- Previous experience with results-based monitoring and evaluation methodologies;
- Technical knowledge in the targeted focal area(s) especially in the field of biodiversity mainstreaming
- Recognized expertise in dealing with the mainstreaming of biodiversity into productive sector projects;
- Experience in medicinal and aromatic plants is a plus
- Recent experience with result-based management evaluation methodologies;
- Experience applying participatory monitoring approaches;
- Recent knowledge of and experience with the GEF Monitoring and Evaluation Policy;
- Recent knowledge of and experience with UNDP's results-based evaluation policies and procedures
- Competence in Adaptive Management, as applied to conservation or natural resource management projects;
- Familiarity with nature management and conservation policies;
- Familiarity with agriculture and green economy aspects will be considered an asset;
- Experience with nature management and conservation policies in Arab States region will be considered an asset;
- Demonstrable analytical skills;
- Excellent, proven management and communication skills;
- Excellent English communication skills.

## EVALUATOR ETHICS

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Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the [UNEG 'Ethical Guidelines for Evaluations'](#).

## PAYMENT MODALITIES AND SPECIFICATIONS

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%	Milestone
40%	Following submission and approval of the 1ST draft terminal evaluation report
60%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

## APPLICATION PROCESS

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Applicants are requested to apply online (indicate the site, such as <http://jobs.undp.org>, etc.) by (date). Individual consultants are invited to submit applications/methodology together with their CV for these positions and a price

offer. The application should contain a current and complete C.V. in English with indication of the e-mail and phone contact. The price offer should be submitted separately, indicating:

- Lump sum cost (total cost of the assignment) must be all inclusive<sup>7</sup>
- The contract price is fixed regardless of changes in the cost components
- DSA at a daily rate of \$288

UNDP applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their application/methodology and financial proposals based on the below criteria. Qualified women and members of social minorities are encouraged to apply.

## **CRITERIA FOR SELECTION OF THE BEST OFFER**

Combined Scoring method – where the qualifications and methodology will be weighted a max. of 70%, and combined with the price offer which will be weighted a max of 30%;

Key criteria for Technical evaluation

Key Criteria	% grade
Qualifications (as defined under Team Composition)	30%
Relevant experience (as defined under Team Composition)	30%
Experience in UNDP-GEF project evaluations	20%
Proposed methodology	20%

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<sup>7</sup>The term “all inclusive” implies that all costs (professional fees, travel costs, living allowances, communications, consumables, etc.) that could possibly be incurred by the Contractor are already factored into the final amounts submitted in the proposal.

## ANNEX A: PROJECT LOGICAL FRAMEWORK (REVISED)

Project Strategy	Indicator	Baseline	Target	Sources of Verification	Risks and Assumptions
<b>Objective of the project:</b> To integrate conservation objectives into the gathering, processing and marketing of globally significant MAPs	<b>Impact on Biodiversity:</b> <ul style="list-style-type: none"> <li>Operational guidelines for target species per typology</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Operational guidelines for each of the project's target species by end of project</li> </ul>	<ul style="list-style-type: none"> <li>Project reporting</li> <li>Project review and assessments through stakeholder interviews and field validation</li> </ul>	<ul style="list-style-type: none"> <li>Barriers to sustainable wild collection of target species, such as open access are difficult to overcome on project sites</li> <li>There is a higher demand for MAP raw material than can be collected sustainably from community territory</li> <li>Not all target species may be suitable for sustainable harvesting</li> <li>Willingness of local community to become proactive in the projects activities and accept the proposed sustainable harvesting</li> </ul>
	<b>Impact on Response Measures:</b> <ul style="list-style-type: none"> <li>Number of value-added branded products traceable to sources harvested according to adopted sustainable wild harvest guidelines for target species (e.g., FairWild standard 2.0 principles and criteria)</li> </ul>	<ul style="list-style-type: none"> <li>0</li> </ul>	<ul style="list-style-type: none"> <li>8 by end of project</li> </ul>	<ul style="list-style-type: none"> <li>Project reporting and monitoring</li> <li>Project review and assessments through stakeholder interviews and field validation</li> </ul>	<ul style="list-style-type: none"> <li>The long procedures required for attaining the Fair Wild certification based on the ISSC-MAP principles may exceed the available timeframe of the project</li> <li>Market competitive edge for sustainably harvested product which will encourage the private sector to initiate new sustainably harvested product lines</li> <li>Private sector owns the means for investments or willing to take the risk of credits</li> </ul>

Project Strategy	Indicator	Baseline	Target	Sources of Verification	Risks and Assumptions
<b>Outcome 1:</b> Appropriate collection methods ensure a viable long-term supply of raw materials of globally significant MAP species	<b>Impact on Pressure:</b> <ul style="list-style-type: none"> <li>• Appropriate qualitative / quantitative measures adopted for target species and conservation objectives for project sites as defined in management plans</li> <li>• Proportion of local people versus outsiders directly gaining income from sustainably harvested MAPs increases</li> </ul>	<ul style="list-style-type: none"> <li>• No existing management plans</li> <li>• Majority outsiders involved in collection from project sites</li> </ul>	<ul style="list-style-type: none"> <li>• Resource management plan implemented in each project pilot site by end of project</li> <li>• Majority local collectors, involved in the collection and primary processing of commercially viable target species collected from project sites by end of project</li> </ul>	<ul style="list-style-type: none"> <li>• Field assessments and monitoring for each target species/project site</li> <li>• Certification audits</li> <li>• Community based enterprises' employment and book keeping records</li> </ul>	<ul style="list-style-type: none"> <li>• Legal agreements for resource use plans between landowners and collectors will be formalized and adhered to</li> <li>• Implementation depends on goodwill and social control at community level</li> <li>• The low articulation of access rights to MAPs permits commercial harvesters to have free and uncontrolled access to wild stocks</li> <li>• There are doubts whether value-added MAP products can create sufficient economic incentives to induce the desired behavioral change within the industry and establish the self-enforcement mechanisms necessary to "crowd out" non-complying industry participants</li> <li>• Collectors / middlemen, resource owners and management authorities participate in developing and implementing sustainable wild harvest management plans</li> </ul>
<b>Outputs from Outcome 1:</b> 1.1 Community-based enterprises (CBE) for MAP collecting and primary processing established, or appropriate existing CBEs involved 1.2 Collectors trained in MAP identification and sustainable harvesting methods 1.3 Certification system for sustainable harvest developed and applied 1.4 Management plans for target species collection from project sites developed and implemented 1.5 Community-based resource use agreements set up and enforced 1.6 Conservation assessments according to IUCN criteria					
<b>Outcome 2:</b> Value-added processing and product	<b>Impact on Pressure:</b> <ul style="list-style-type: none"> <li>• Volumes of sustainably harvested target species traded in processed form</li> </ul>	<ul style="list-style-type: none"> <li>• 0</li> </ul>	<ul style="list-style-type: none"> <li>• At least 800 tons by end of project (of</li> </ul>	<ul style="list-style-type: none"> <li>• Certification audits</li> <li>• Community based enterprises' book</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholders willing to transform the MAP market from an informal to a more structures system</li> </ul>

Project Strategy	Indicator	Baseline	Target	Sources of Verification	Risks and Assumptions
improvement result in increased value of globally significant MAPs harvested in biodiversity-friendly manner	(volumes to be determined for each target species)  • Number of community based enterprises applying sustainability guidelines for target species	• None	which 5 tons will come from project sites)  • At least 5 community based enterprises by end of project	keeping records • Ministry of agriculture records  • Project reporting and monitoring	<ul style="list-style-type: none"> <li>• There is a higher demand for MAP raw material than can be collected sustainably from community territory</li> <li>• MAP community based enterprises fail to provide sufficient economic returns, significantly eroding the interest of local communities to pursue sustainable harvesting</li> </ul>
	<b>Impact on Response Measures:</b> • Increased price of sustainably harvested wild MAPs along the value chain from raw products to locally manufactured products meet business plan targets, create adequate incentives	• Market price for uncertified products	• Increase by at least 20% per product	<ul style="list-style-type: none"> <li>• Business agreements between community based enterprises and private sector</li> <li>• Community based enterprises' book keeping records</li> </ul>	<ul style="list-style-type: none"> <li>• Consumers willing to pay more for sustainably produced products</li> <li>• National and regional market for value-added products available for commercially viable target species</li> </ul>
<b>Outputs from Outcome 2:</b> 2.1 Manufacturing and trading companies upgraded 2.2 Locally processed MAP products branded 2.3 Innovative MAP based products developed and introduced into the market					
<b>Outcome 3:</b> Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation-friendly MAP	<b>Impact on Pressure:</b> <ul style="list-style-type: none"> <li>• Portion of MAP consumers aware of the existence and importance of sustainably harvested MAP products</li> <li>• MAP collection from the wild in accordance to nationally recognized</li> </ul>	<ul style="list-style-type: none"> <li>• 0</li> <li>• No system in place</li> </ul>	<ul style="list-style-type: none"> <li>• 5000</li> <li>• Permit system developed and adopted by</li> </ul>	<ul style="list-style-type: none"> <li>• Project reporting and monitoring</li> <li>• Project review and assessments through stakeholder interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Increased awareness will directly lead to increased demand</li> <li>• Consumer trust in MAP derived products and certification system.</li> <li>• Proper labeling and certification based on national capacity to deliver a reliable , transparent, and economically feasible verification system</li> </ul>

Project Strategy	Indicator	Baseline	Target	Sources of Verification	Risks and Assumptions
products	system		local and national government authorities by end of project	and field validation	
	<ul style="list-style-type: none"> <li>Revised regulatory framework for wild harvesting and trade of MAPs</li> </ul>	<ul style="list-style-type: none"> <li>Existing decision (340/1-1996)</li> </ul>	<ul style="list-style-type: none"> <li>New decree considering project recommendations / results by end of project</li> </ul>	<ul style="list-style-type: none"> <li>Project reporting and monitoring</li> </ul>	
	<b>Impact on Response Measures:</b> <ul style="list-style-type: none"> <li>National MAP Association functional established and active</li> <li>Business management of the community based enterprises take into consideration the management plans for each project site</li> <li>Traders / processors conditioning purchase to sustainable harvesting</li> </ul>	<ul style="list-style-type: none"> <li>No such organization</li> <li>None</li> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>MAP Association established and facilitating broader implementation of project objectives</li> <li>Business plan for each community based enterprise by end of project</li> <li>At least 3 national</li> </ul>	<ul style="list-style-type: none"> <li>MAP Association mandate and activities</li> <li>Project reporting and monitoring</li> <li>Project review and assessments through stakeholder interviews and field validation</li> <li>Specification and purchase records of the community based</li> </ul>	<ul style="list-style-type: none"> <li>MAP Association will be representative for the whole MAP industry and other stakeholders / actors important to ongoing implementation of the project objectives and sustainability beyond the projects lifespan</li> <li>Proper labeling and certification based on national capacity to deliver a reliable , transparent, and economically feasible verification system</li> </ul>



Project Strategy	Indicator	Baseline	Target	Sources of Verification	Risks and Assumptions
	practices		manufacturing companies by end of project	enterprises	
<b>Outputs from Outcome 3:</b> 3.1 National MAP Association established to facilitate roles and partnerships important to ongoing sustainable management of MAP resources in Lebanon 3.2 Guidelines on sustainable harvesting practices and/or conservation strategies agreed for each target species, training modules developed and widely applied 3.3 Certification system developed, agreed and put into practice 3.4 Regulative framework on collection, processing as well as on national and international trade developed 3.6 Consumer awareness for sustainably harvested products raised					
<b>Outcome 4:</b> Learning, evaluation, and adaptive management	<b>Impact on Response Measures:</b> <ul style="list-style-type: none"> <li>Annual updates of gender analysis, risk mitigation strategy and impact assessment</li> </ul>	<ul style="list-style-type: none"> <li>As described in Project Document</li> </ul>	<ul style="list-style-type: none"> <li>Results incorporated in the annual work plans</li> </ul>	<ul style="list-style-type: none"> <li>Annual work plans</li> </ul>	<ul style="list-style-type: none"> <li>Qualified, experienced and affordable expertise available in the region</li> <li>Flexibility of project partners to react on new developments and requirements</li> </ul>
<b>Outputs from Outcome 4:</b> 4.1 Monitoring programme established 4.2 Adaptive management and strategic planning system established 4.3 Lessons learned and impact data are gathered, documented and disseminated to key internal and external audiences					

## **ANNEX B: LIST OF DOCUMENTS TO BE REVIEWED BY THE EVALUATORS**

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- Project Identification Form (PIF)
- Project Document
- Log frame Analysis (LFA)
- Inception Report
- Mid Term Review Report
- Annual Work Plans
- Implementing/executing partner arrangements
- List and contact details for project staff, key project stakeholders, including Project Boards, and other partners to be consulted
- Project sites, highlighting suggested visits
- Financial Data
- Project budget, broken out by outcomes and outputs
- Project implementation reports (PIR) 2008-2012
- GEF SO2 Biodiversity tracking tool (2008-2012)
- Final project report
- Final technical report
- Experts progress reports:
  - National conservation expert
  - International conservation expert
  - Marketing & Capacity Building expert
- Awareness material (leaflets, brochures)
- Training material (Illustrated identification guide for the project target species, Training documentary on sustainable wild harvesting of sage and oregano)
- IUCN conservation assessments for the project target species
- Business plans for project pilot sites
- Business plan for sage and oregano production lines
- Management plans for the project pilot sites
- Medicinal and Aromatic Plants legal study
- Rapid International market study for project targets species

## ANNEX C: EVALUATION QUESTIONS

Evaluative Criteria	Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?				
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?				
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?				
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?				
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?				

## ANNEX D: RATING SCALES

<p><b><i>Ratings for Outcomes, Effectiveness, Efficiency, M&amp;E, I&amp;E Execution</i></b></p> <p>6: Highly Satisfactory (HS): no shortcomings  5: Satisfactory (S): minor shortcomings  4: Moderately Satisfactory (MS)  3: Moderately Unsatisfactory (MU): significant shortcomings  2: Unsatisfactory (U): major problems  1: Highly Unsatisfactory (HU): severe problems</p>	<p><b><i>Sustainability ratings:</i></b></p> <p>4. Likely (L): negligible risks to sustainability  3. Moderately Likely (ML): moderate risks  2. Moderately Unlikely (MU): significant risks  1. Unlikely (U): severe risks</p>	<p><b><i>Relevance ratings</i></b></p> <p>2. Relevant (R)  1.. Not relevant (NR)</p> <p><b><i>Impact Ratings:</i></b></p> <p>3. Significant (S)  2. Minimal (M)  1. Negligible (N)</p>
<p><b><i>Additional ratings where relevant:</i></b>  Not Applicable (N/A)  Unable to Assess (U/A)</p>		

## ANNEX E: EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM

### Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

### Evaluation Consultant Agreement Form<sup>8</sup>

#### Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: \_\_\_\_\_

Name of Consultancy Organization (where relevant): \_\_\_\_\_

**I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.**

Signed at *place on date*

Signature: \_\_\_\_\_

<sup>8</sup>[www.unevaluation.org/unegcodeofconduct](http://www.unevaluation.org/unegcodeofconduct)

## ANNEX F: EVALUATION REPORT OUTLINE<sup>9</sup>

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- i. Opening page:
  - Title of UNDP supported GEF financed project
  - UNDP and GEF project ID#s.
  - Evaluation time frame and date of evaluation report
  - Region and countries included in the project
  - GEF Operational Program/Strategic Program
  - Implementing Partner and other project partners
  - Evaluation team members
  - Acknowledgements
- ii. Executive Summary
  - Project Summary Table
  - Project Description (brief)
  - Evaluation Rating Table
  - Summary of conclusions, recommendations and lessons
- iii. Acronyms and Abbreviations  
(See: UNDP Editorial Manual<sup>10</sup>)
1. Introduction
  - Purpose of the evaluation
  - Scope & Methodology
  - Structure of the evaluation report
2. Project description and development context
  - Project start and duration
  - Problems that the project sought to address
  - Immediate and development objectives of the project
  - Baseline Indicators established
  - Main stakeholders
  - Expected Results
3. Findings  
(In addition to a descriptive assessment, all criteria marked with (\*) must be rated<sup>11</sup>)
- 3.1 Project Design / Formulation
  - Analysis of LFA/Results Framework (Project logic /strategy; Indicators)
  - Assumptions and Risks
  - Lessons from other relevant projects (e.g., same focal area) incorporated into project design
  - Planned stakeholder participation
  - Replication approach
  - UNDP comparative advantage
  - Linkages between project and other interventions within the sector
  - Management arrangements
- 3.2 Project Implementation
  - Adaptive management (changes to the project design and project outputs during implementation)
  - Partnership arrangements (with relevant stakeholders involved in the

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<sup>9</sup>The Report length should not exceed 40 pages in total (not including annexes).

<sup>10</sup> UNDP Style Manual, Office of Communications, Partnerships Bureau, updated November 2008

<sup>11</sup> Using a six-point rating scale: 6: Highly Satisfactory, 5: Satisfactory, 4: Marginally Satisfactory, 3: Marginally Unsatisfactory, 2: Unsatisfactory and 1: Highly Unsatisfactory, see section 3.5, page 37 for ratings explanations.



- country/region)
  - Feedback from M&E activities used for adaptive management
  - Project Finance:
  - Monitoring and evaluation: design at entry and implementation (\*)
  - UNDP and Implementing Partner implementation / execution (\*) coordination, and operational issues
- 3.3 Project Results
- Overall results (attainment of objectives) (\*)
  - Relevance(\*)
  - Effectiveness & Efficiency (\*)
  - Country ownership
  - Mainstreaming
  - Sustainability (\*)
  - Impact
4. Conclusions, Recommendations & Lessons
- Corrective actions for the design, implementation, monitoring and evaluation of the project
  - Actions to follow up or reinforce initial benefits from the project
  - Proposals for future directions underlining main objectives
  - Best and worst practices in addressing issues relating to relevance, performance and success
5. Annexes
- ToR
  - Itinerary
  - List of persons interviewed
  - Summary of field visits
  - List of documents reviewed
  - Evaluation Question Matrix
  - Questionnaire used and summary of results
  - Evaluation Consultant Agreement Form

## ANNEX G: EVALUATION REPORT CLEARANCE FORM

Evaluation Report Reviewed and Cleared by

UNDP Country Office

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

UNDP GEF RTA

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Annex II: Itinerary of Activities of the Final Evaluation Mission

Dates	Task	Time proposed
<b>A. Preparation</b>		
19 – 22 June, 2013	<ul style="list-style-type: none"> <li><b>Home-based work to</b> prepare for evaluation including desk review of documents provided in advance at home office and develop preliminary evaluation methodology</li> <li><b>Depart from home country (23 June, 2013)</b></li> </ul>	4 days
23 June, 2013	<ul style="list-style-type: none"> <li>International consultant arrives in country.</li> </ul>	
<b>B. Evaluation Mission</b>		
24, June 2013	Briefing meeting with UNDP and site engineer at LARI Fanar (overview of the project)	1 day
25 June, 2013	Site visit to MejdellAkkar (all day)	1 day
26 June, 2013	Site visit to Hsarat and Assia sites (all day)	1 day
27 June, 2013	9:30 – 10:30am: Ministry of Agriculture 11:00 – 12:30pm: Atayeb El Rif 1:00 – 2:30pm: Debriefing with UNDP	1 day
28 June, 2013	<ul style="list-style-type: none"> <li>Site visit to Mristi</li> </ul>	1day
<b>C. Draft Evaluation Report</b>		
30 June - 15 July, 2013	<ul style="list-style-type: none"> <li><b>Home-based work to</b> prepare draft report</li> <li>Submission of final draft report to UNDP for comments and suggestions</li> </ul>	16 days
27 July 2013	<ul style="list-style-type: none"> <li>UNDP provides comments and suggestions on draft report</li> </ul>	
<b>D. Final Evaluation Report</b>		
28-29 July, 2013	<b>Home-based work to</b> finalize report based on comments from stakeholders, followed by submission of the final report to UNDP for further circulation	2 day
30 July 2013	Submission of final report to UNDP for further dissemination	

### **Annex III: Persons Interviewed**

(S) = skype interview.

#### **UNDP / GEF**

Ms.Jihane Seoud	Programme Analyst, UNDP Lebanon
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#### **LARI /Implementing Team**

Mr. Michel Antoine Afram	President - Director General, LARI
Ms. Maya Abboud	Project Manager (S)
Mr. Hady Brood	Site Engineer
Ms. Carol Hachen	Site Engineer
Dr. Johad R. Noam	Technical Consultant

#### **Ministry of Agriculture**

Ms.ZienaTamim	Rangeland, Public Gardens & Protected Forests Service
Ms. Carla Jamous	Rangeland, Public Gardens & Protected Forests Service
Ms. Mona Assaf	Rangeland, Public Gardens & Protected Forests Service

#### **Municipality/Village Committee/Cooperatives/Collectors**

Mr. Emile Bedran	Mayor, Assia
Mr. Ahmad Diab	Mukhtar, Mejdal
Mr.MoussaBoulos	Mukhtar, Hsarat
Mr.AbdallahBoulos	Collector, Hsarat
Mr.Yousses Ibrahim	Collector, Hsarat
Ms. May Traboulsi	Manager, Atayeb AT Rif
Ms.FatenGhais	Technical Assistant, Rural Development, Shouf Biosphere Reserve
Ms. Rania Zaidan	Leader of Women group, Mrusti

## Annex IV: Summary Evaluation of Project Achievements by Objectives and Outcomes

The Project logframe in the Project Document was revised in the Inception Report. The present evaluation matrix uses the version contained in the Inception Report and also used by the MTR.

### KEY:

**GREEN** = Indicators show achievement successful at the end of the Project.

**YELLOW** = Indicators show achievement nearly successful at the end of the Project.

**RED** = Indicators not achieved at the end of Project.

HATCHED COLOUR = estimate; situation either unclear or indicator inadequate to make a firm assessment against.

**Project Objective:** To integrate conservation objectives into the gathering, processing and marketing of globally significant MAPs.

Project Strategy	Outputs	Indicator	Baseline	Achievements
<b>Outcome 1:</b> Appropriate collection methods ensure a viable long term supply of raw materials of globally significant MAP species	1.1 Community-based enterprises (CBE) for MAP collecting and primary processing established, or appropriate existing CBEs involved 1.2 Collectors trained in MAP identification and sustainable harvesting methods 1.3 Certification system for sustainable harvest developed and applied 1.4 Management plans for target species collection from project sites developed and implemented 1.5 Community-based resource use agreements set up and enforced	<ul style="list-style-type: none"> <li>• Appropriate qualitative /quantitative measures adopted for target species and conservation objectives for project sites as defined in management plans</li> <li>• Proportion of local people versus outsiders directly gaining income from sustainably harvested MAPs increases</li> </ul>	<ul style="list-style-type: none"> <li>• No existence of management plans</li> <li>• Majority outsiders involved in collection from project sites</li> </ul>	<ul style="list-style-type: none"> <li>• Based on a comprehensive and strategic field investigation in more than 150 villages/sites and meeting with more than 200 stakeholders, sites were identified for piloting projects and establishment of CBEs.</li> <li>• Established CBEs for wild MAP collection and processing at the 4 project pilot sites.</li> <li>• Reactivated 2 inactive cooperatives (Mejdel and Assia) completing all required legal and administrative procedures.</li> <li>• Established a new cooperative in Mrusti pilot site.</li> <li>• Equipped the CBE's at each project pilot site with the required equipment, machinery and infrastructure in order to improve post-harvest and primary processing of MAPs</li> <li>• Built CBE's capacity to effectively manage and sustainably use their natural resources and effectively operate pre-processing value adding enterprises that produce certified sustainably harvested end-products.</li> <li>• Provided a comprehensive training on administrative and financial management, post-harvest quality control, marketing, participatory management planning and sales techniques (21 training sessions for 370 participants)</li> <li>• Improved production capacity and quality at the CBEs</li> <li>• Developed the capacity of local collectors and forest rangers on</li> </ul>

	1.6 Conservation assessments according to IUCN criteria.		<p>the importance of MAPs and their sustainable wild harvesting (4 sessions, 40 participants)</p> <ul style="list-style-type: none"> <li>• Developed training material and tools (brochures, illustrated guideline for best practices in MAP harvesting and post harvesting, training documentary on sustainable wild harvesting of MAPs in Lebanon, illustrated identification guide for selected MAPs in Lebanon) on sustainable wild harvesting and post-harvest best practices</li> <li>• Developed and implemented sustainable MAP wild harvesting standards based on intensive technical field work</li> <li>• Incorporated sustainable wild harvesting standards into a new national certification for high quality Lebanese products “Cedar Excellence” seal which ensures quality, hygiene, social and economic standards.</li> <li>• Assisted project sites to obtain organic and wild harvesting certification for two seasons</li> <li>• Implemented sustainable wild harvesting at pilot sites in accordance to developed standards and new decision</li> <li>• Developed and implemented management plans for all pilot site CBE which tackle both the wild MAP resources as well as other products produced by the CBE</li> <li>• Resource management included in the management plans developed for each project pilot site</li> <li>• Resource management agreements secured through the permit required by the Ministerial Decision</li> <li>• Gained unavailable and essential knowledge about all project target species in terms of their status, limitations and potential through distribution surveys, density assessments, marketable productivity (kg), prices and market channels monitoring, mapping and discussion with concerned stakeholders at a national level</li> <li>• Developed and implemented comprehensive species assessment and monitoring programs at the four project pilot sites to provide sound, technical and indicative standards for sustainable harvesting that feed into certification and regulation processes</li> <li>• Finalized IUCN Red list conservation assessment for the seven project target MAP species after consultation with national experts and government entities.</li> </ul>



<b>Outcome 2:</b> Value-added processing and product improvement result in increased value of globally significant MAPs harvested in biodiversity-friendly manner	2.1 Manufacturing and trading companies upgraded 2.2 Locally processed MAP products branded 2.3 Innovative MAP based products developed and introduced into the market	<ul style="list-style-type: none"> <li>• Volumes of sustainably harvested target species traded in processed form (volumes to be determined for each target species)</li> <li>• Number of community based enterprises applying sustainability guidelines for target species</li> <li>• Increased price of sustainably harvested wild MAPs along the value chain from raw products to locally manufactured products meet business plan targets, create adequate incentives</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> <li>• None</li> <li>• Market price for uncertified products</li> </ul>	<ul style="list-style-type: none"> <li>• Conducted national and international market research and investigations to identify potential buyers</li> <li>• The project established contact with 32 national companies and 100 international companies through the attendance of the World Organic Trade Fair BIOFACH. 9 national companies expressed interest in purchasing from the pilot sites, hence the CBEs are linked with them.</li> <li>• Provided technical assistance and knowledge to extract essential oil from MAP species to a national manufacturing company to produce a new MAP based body and hair care production line</li> <li>• Developed a unique brand “Nabta” for a new line of body and hair care products made from sustainably harvested MAPs for a national manufacturing company “Khan Al Saboun” purchasing sage from the project pilot sites</li> <li>• Organized a press conference on the role of the private sector in promoting sustainable wild harvesting of medicinal and aromatic plants</li> <li>• Initiated a long-term alliance between a well-established and successful national marketing cooperative with a long history of cooperation and support with a large network of national cooperatives across Lebanon. The alliance has enhanced the marketability and accessibility of local production from the project's CBEs to national and international markets. The cooperative provided guidance and support to enhance the CBE's product image, develop and implement marketing strategies as well as improve logistical and financial issues pertaining to marketing and sales</li> <li>• Allowed for market expansion and improved competitiveness and marketability for the production of the community based enterprises and higher prices through: certification, better marketing and sales techniques, improved collection methods, improved post-harvest and processing practices, links to national markets</li> <li>• Developed a unified brand “Lebanese VILLAGE products” representing products that are 100% natural, quality controlled, traditionally made, no preservatives or additives, made in Lebanon and processed by local communities. The brand name is owned by UNDP and right of use given to Atayeb Al Rif national cooperative through a signed MoU. The unified brand name was intended to facilitate the CBE's transition into the market by</li> </ul>

				incorporating sustainably harvested MAP products into a large production line with existing markets channels <ul style="list-style-type: none"> <li>• Conducted biological, chemical and physical testing for MAPs to identify potential marketing challenges</li> <li>• Conducted essential oil analysis for MAP species at different collection periods and regions in order to provide the market with accurate data on yield and profile variation</li> <li>• Developed and introduced 8 products into the market</li> </ul>
<b>Outcome 3:</b> Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation friendly MAP products	3.1 National MAP Association established to facilitate roles and partnerships important to on-going sustainable management of MAP resources in Lebanon 3.2 Guidelines on sustainable harvesting practices and/or conservation strategies agreed for each target species, training modules developed and widely applied 3.3 Certification system developed, agreed and put into practice 3.4 Regulative framework on collection, processing as well as on national and international trade developed 3.6 Consumer awareness for sustainably harvested products raised	<ul style="list-style-type: none"> <li>• Portion of MAP consumers aware of the existence and importance of sustainably harvested MAP products</li> <li>• MAP collection from the wild in accordance to nationally recognized system</li> <li>• Revised regulatory framework for wild harvesting and trade of MAPs</li> </ul>	<ul style="list-style-type: none"> <li>• 0</li> <li>• No system in place</li> <li>• Existing decision (340/1-1996)</li> </ul>	<ul style="list-style-type: none"> <li>• Supported the national MAP steering committee based at the Ministry of Agriculture and participated in all meetings and activities</li> <li>• Developed conservation operational guideline for medicinal and aromatic plants in Lebanon based on the project's experience, activities and outputs</li> <li>• Developed a categorized list of the most important wild Lebanese medicinal and aromatic plants</li> <li>• Developed and implemented theoretical and practical training sessions on sustainable wild harvesting of MAPs and the implementation of the new Ministerial Decision for sage and oregano targeting Ministry of Agriculture staff from all regions in Lebanon (forest rangers, extension service engineers, export and import departments) and customs staff (7 sessions 250 participants)</li> <li>• Conducted trainings for customs and MoA export and import staff on sustainable wild harvesting of MAPs and the implementation of the new Ministerial Decision for sage and oregano (2 sessions, 20 participants)</li> <li>• Developed and implemented a comprehensive resource assessment and monitoring programs at the four pilot sites to provide sound, technical and indicative standards for sustainable wild harvesting to feed into certification and regulation</li> <li>• Developed practical, quick and easily adopted methodologies and tools for assessing the productivity (kg) of <i>Salvia fruticosa</i> "Kaseen" and <i>Origanum syriacum</i> "Zaatar" in any site and to ensure the easy, effective and proper implementation the new permit system for sustainable harvesting to be implemented by the Ministry of Agriculture staff</li> <li>• Developed and implemented sustainable MAP wild harvesting standards based on vigor technical field work (resource</li> </ul>

			<p>assessments, species &amp; site monitoring, species regeneration assessments and assessments of different harvesting practices)</p> <ul style="list-style-type: none"> <li>• Incorporated sustainable wild harvesting standards into a new national certification for high quality Lebanese products “Cedar Excellence” seal which includes quality, hygiene, social and economic criteria</li> <li>• Assisted project sites to obtain organic and wild harvesting certification for two seasons</li> <li>• Implemented sustainable wild harvesting at pilot sites in accordance to developed standards and new Ministerial Decision</li> <li>• Assessed the existing institutional framework for MAP conservation and management in order to identify gaps and necessary actions</li> <li>• Collaborated with MoA to involve and train custom officials for better control of MAP import and export</li> <li>• Provided technical and legal input as well continuous support, guidance and lobbying to the Ministry of Agriculture to develop the new Ministerial Decision (1/179) that was enactment on 3/3/2012 to regulate wild harvesting of sage and oregano and to ensure that it’s done according to sustainability criteria in terms of time, quantity and method as well as to regulate its transport and export. Under the new decision, a permit must be attained for all sage and oregano collected in Lebanon for commercial purposes</li> <li>• Monitored the first implementation season of the new Ministerial Decision by following up with forest rangers, collectors, traders and customs in collaboration with MoA. The monitoring helped the project and MoA identify gaps, challenges, technical problems such as miscalculation of the allowed harvestable yield which will guide the modification of the Ministerial Decision in the medium term as well as better orient the draft MAP decree</li> <li>• Provided technical input to modify the national standard (Libnor) for sage and participated in all technical committee meetings which led to the successful modification and adoption of a new standard.</li> <li>• Provided technical input to develop and adopt a new national standard (Libnor) for “zaatar” based on a rigorous methodology developed and implemented by the project. The methodology is based on the experience gained by the project in this sector, data collected during the project’s duration as well as specific sampling and testing. The standard will provide more accurate,</li> </ul>
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				<p>comprehensive and useful standards to meet both the diverse market demands as well as the health, safety and authenticity concerns of consumers. The national standard will complement the marketing and regulation initiatives undertaken by the project by providing specific standards for different categories of “zaatar” thereby allowing for a well-justified market niche for high quality production characterized by artisanal and local production versus the commercial production. The national standard will provide the customs and MoA import /export staff with a an effective and useful tool to monitor and control the import, export and national consumption of “Zaatar” which currently is very challenging without clear and effective standards. Furthermore, Libnor will propose the new Zaatar standard as a regional codex standard.</p> <ul style="list-style-type: none"> <li>• Sage and oregano products from the four-project pilot sites were exhibited in various local and international expositions targeting different audience</li> </ul>
		<ul style="list-style-type: none"> <li>• National MAP Association functional established and active</li> <li>• Business management of the community based enterprises take into consideration the management plans for each project site</li> <li>• Traders / processors conditioning purchase to sustainable harvesting practices</li> </ul>	<p>No such organisation</p> <p>None</p> <p>None</p>	<ul style="list-style-type: none"> <li>• MAP Steering committee facilitating broader implementation of project objectives</li> <li>• Business plan for each community based enterprise by end of project At least 3 national manufacturing companies by end of project</li> </ul>
<b>Outcome 4:</b> Learning, evaluation, and adaptive management	<p>4.1 Monitoring programme established</p> <p>4.2 Adaptive management and strategic planning system established</p> <p>4.3 Lessons learned and</p>	<ul style="list-style-type: none"> <li>• Annual updates of gender analysis, risk mitigation strategy and impact assessment.</li> </ul>	<ul style="list-style-type: none"> <li>• As described in Project Document</li> </ul>	<ul style="list-style-type: none"> <li>• Ensured regular and effective collaboration with the implementing entity (Lebanese Agriculture Research Institute) and the Ministry of Agriculture (main government entity responsible for regulating the MAP sector)</li> <li>• Conducted annual project broad meetings</li> <li>• Monitored the impact, adoption success and challenges of the new</li> </ul>

	<p>impact data are gathered, documented and disseminated to key internal and external audiences</p>		<p>Ministerial Decision on different stakeholders (Ministry of Agriculture, collectors, middlemen, trainers, traders and customs) in order to provide accurate field based suggestions and recommendations for required adaptive management in the regulation of the MAP sector</p> <ul style="list-style-type: none"> <li>• Conducted project midterm evaluation during which recommendations were taken into consideration in an adaptive management approach to orient the project's activities in the remaining implementation phase</li> <li>• All project outputs / deliverables uploaded on websites for wide and easy access</li> <li>• Uploaded short documentary on project impact in one pilot site (Mejdel) on You Tube (<a href="http://www.youtube.com/watch?v=tsRzD28I76c">http://www.youtube.com/watch?v=tsRzD28I76c</a>)</li> <li>• Uploaded on websites and You Tube a training documentary on sustainable wild harvesting of MAPs in Lebanon and the implementation of the Ministerial Decision regulating wild harvesting, transport and trade of sage and oregano in Lebanon</li> <li>• Media coverage in 1 TV program, 3 radio interviews, 3 magazine articles and 10 newspaper articles</li> <li>• Conducted an exchange with a newly initiated UNDP project on Morocco on MAPs. The exchange involved technical issues pertaining to the development and implementation of field assessments and surveys undertaken in the Lebanon project as well as overall project activities, results and lessons learned.</li> <li>• The methodologies developed and implemented by the project for the target species national surveys and assessments were highly evaluated by IUCN for its scientific vigor, accuracy and precision. IUCN might consider the project's methodology for calculating the species distribution parameters under the Redlist assessments.</li> </ul>
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**Annex V: Map of Lebanon showing Project Sites**





## Annex VI: Revised Table of Project Indicators

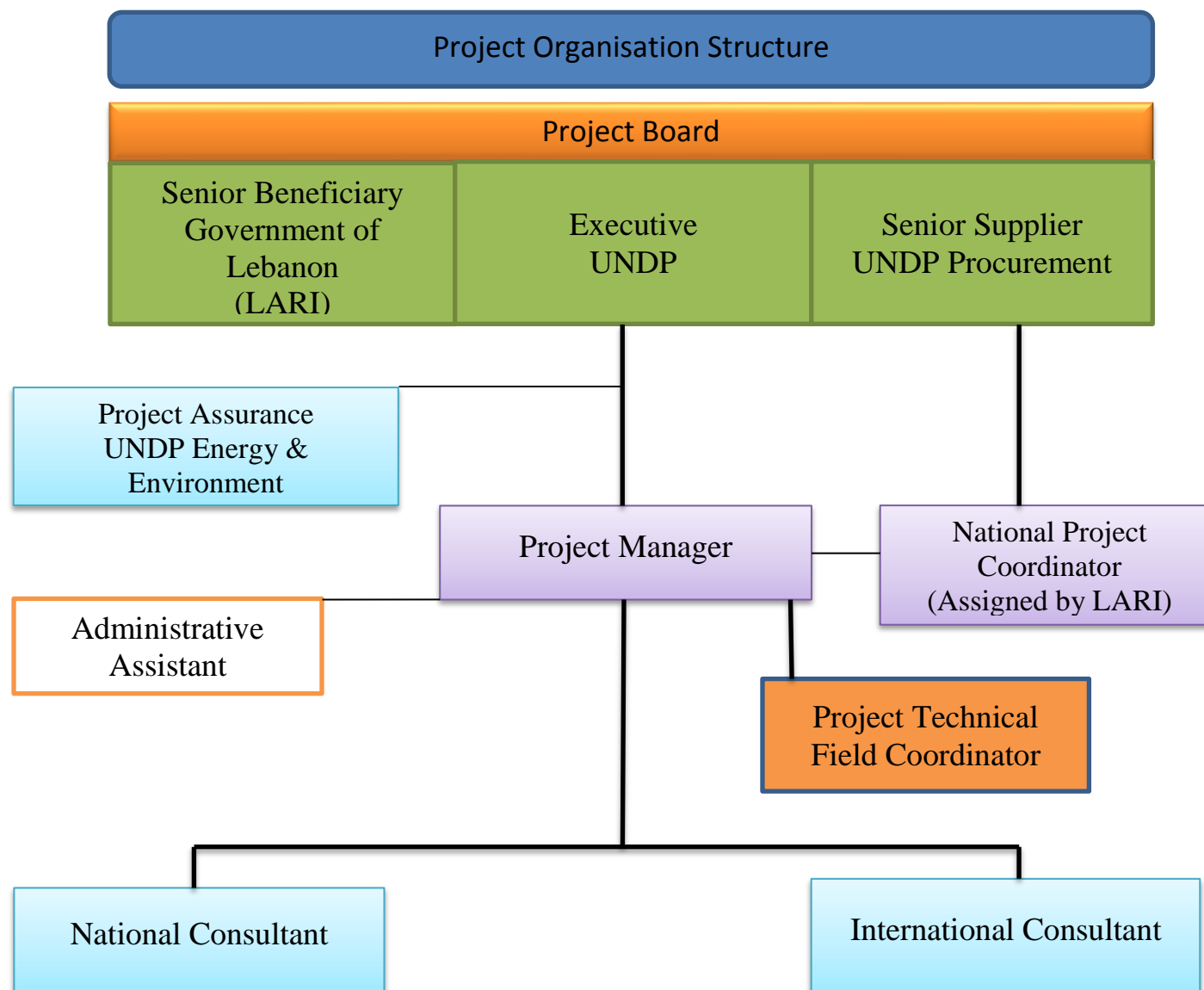
Project Strategy	Indicator	Baseline	Target	Source of verification	Risk and assumption
Objective of the project: To integrate conservation objectives into the gathering, processing and marketing of globally significant MAPs.	<b>Impact on Biodiversity:</b> <ul style="list-style-type: none"> <li>Operational guidelines for target species per typology</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Operational guidelines for each of the project's target species by end of project</li> </ul>	<ul style="list-style-type: none"> <li>Project reporting</li> <li>Project review and assessments through stakeholder interviews and field validation</li> </ul>	<ul style="list-style-type: none"> <li>Barriers to sustainable wild collection of target species, such as open access are difficult to overcome on project sites</li> <li>There is a higher demand for MAP raw material than can be collected sustainably from community territory</li> <li>Not all target species may be suitable for sustainable harvesting</li> <li>Willingness of local community to become proactive in the projects activities and accept the proposed sustainable harvesting</li> </ul>
	<b>Impact on Response Measures:</b> <ul style="list-style-type: none"> <li>Number of value-added branded products traceable to sources harvested according to adopted sustainable wild harvest guidelines for target species (e.g., Fair Wild standard 2.0 principles and criteria)</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>8 by end of project</li> </ul>	<ul style="list-style-type: none"> <li>Project reporting and monitoring</li> <li>Project review and assessments through stakeholder interviews and field validation</li> </ul>	<ul style="list-style-type: none"> <li>The long procedures required for attaining the Fair Wild certification based on the ISSC-MAP principles may exceed the available timeframe of the project</li> <li>Market competitive edge for sustainably harvested product which will encourage the private sector to initiate new sustainably harvested product lines</li> <li>Private sector owns the means for investments or willing to take the risk of credits</li> </ul>
<b>Outcome 1:</b> Appropriate collection methods ensure a viable long term	<b>Impact on Pressure:</b> <ul style="list-style-type: none"> <li>Appropriate qualitative / quantitative measures adopted for target species and</li> </ul>	<ul style="list-style-type: none"> <li>No existence of management plans</li> </ul>	<ul style="list-style-type: none"> <li>Resource management plan implemented in</li> </ul>	<ul style="list-style-type: none"> <li>Field assessments and monitoring for each target species/project site</li> </ul>	<ul style="list-style-type: none"> <li>Legal agreements for resource use plans between landowners and collectors will be formalized</li> </ul>

supply of raw materials of globally significant MAP species	conservation objectives for project sites as defined in management plans <ul style="list-style-type: none"> <li>Proportion of local people versus outsiders directly gaining income from sustainably harvested MAPs increases</li> </ul>	<ul style="list-style-type: none"> <li>Majority outsiders involved in collection from project sites</li> </ul>	<p>each project pilot site by end of project</p> <ul style="list-style-type: none"> <li>Majority local collectors, involved in the collection and primary processing of commercially viable target species collected from project sites by end of project</li> </ul>	<ul style="list-style-type: none"> <li>Certification audits</li> <li>Community based enterprises' employment and book keeping records</li> </ul>	<p>and adhered to</p> <ul style="list-style-type: none"> <li>Implementation depends on goodwill and social control at community level</li> <li>The low articulation of access rights to MAPs permits commercial harvesters to have free and uncontrolled access to wild stocks</li> <li>There are doubts whether value added MAP products can create sufficient economic incentives to induce the desired behavioural change within the industry and establish the self-enforcement mechanisms necessary to "crowdout" non-complying industry participants</li> <li>Collectors / middlemen, resource owners and management authorities participate in developing and implementing sustainable wild harvest management plans</li> </ul>
<b>Outputs from Outcome 1:</b> 1.1 Community-based enterprises (CBE) for MAP collecting and primary processing established, or appropriate existing CBEs involved 1.2 Collectors trained in MAP identification and sustainable harvesting methods 1.3 Certification system for sustainable harvest developed and applied 1.4 Management plans for target species collection from project sites developed and implemented 1.5 Community-based resource use agreements set up and enforced 1.6 CONSERVATION ASSESSMENTS ACCORDING TO IUCN CRITERIA					
<b>Outcome 2:</b> Value-added processing and product improvement result in increased value of globally significant MAPs harvested in biodiversity-friendly	<b>Impact on Pressure:</b> <ul style="list-style-type: none"> <li>Volumes of sustainably harvested target species traded in processed form (volumes to be determined for each target species)</li> <li>Number of community based enterprises applying sustainability</li> </ul>	<ul style="list-style-type: none"> <li>None</li> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>At least 800 tons by end of project (of which 5 tons will come from project sites)</li> <li>At least 5community based enterprises by end of project</li> </ul>	<ul style="list-style-type: none"> <li>Certification audits</li> <li>Community based enterprises' book keeping records</li> <li>Ministry of agriculture records</li> <li>Project reporting and monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholders willing to transform the MAP market from an informal to a more structures system</li> <li>There is a higher demand for MAP raw material than can be collected sustainably from community</li> </ul>

manner	guidelines for target species				territory <ul style="list-style-type: none"> <li>MAP community based enterprises fail to provide sufficient economic returns, significantly eroding the interest of local communities to pursue sustainable harvesting</li> </ul>
	<b>Impact on Response Measures:</b> <ul style="list-style-type: none"> <li>Increased price of sustainably harvested wild MAPs along the value chain from raw products to locally manufactured products meet business plan targets, create adequate incentives</li> </ul>	<ul style="list-style-type: none"> <li>Market price For uncertified products</li> </ul>	<ul style="list-style-type: none"> <li>Increase by at least 20% per product</li> </ul>	<ul style="list-style-type: none"> <li>Business agreements between community based enterprises and private sector</li> <li>Community based enterprises' book keeping records</li> </ul>	<ul style="list-style-type: none"> <li>Consumers willing to pay more for sustainably produced products</li> <li>National and regional market for value-added products available for commercially viable target species</li> </ul>
<b>Outputs from Outcome 2:</b> 2.1 Manufacturing and trading companies upgraded 2.2 Locally processed MAP products branded 2.3 Innovative MAP based products developed and introduced into the market					
<b>Outcome 3:</b> Supply chain framework strengthened for sustainable harvest of globally significant MAP species and awareness promoted for conservation friendly MAP products	<b>Impact on Pressure:</b> <ul style="list-style-type: none"> <li>Portion of MAP consumers aware of the existence and importance of sustainably harvested MAP products</li> <li>MAP collection from the wild in accordance to nationally recognized system</li> <li>Revised regulatory framework for wild harvesting and trade of MAPs</li> </ul>	<ul style="list-style-type: none"> <li>0</li> <li>No system in place</li> <li>Existing decision(34 0/1-1996)</li> </ul>	<ul style="list-style-type: none"> <li>5000</li> <li>Permit system developed and adopted by local and national government authorities by end of project</li> <li>New decree considering project recommendations/ results by end of project</li> </ul>	<ul style="list-style-type: none"> <li>Project reporting and Monitoring</li> <li>Project review and assessments through stakeholder interviews and field validation</li> <li>Project reporting and monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Increased awareness will directly lead to increased demand</li> <li>Consumer trust in MAP derived products and certification system.</li> <li>Proper labelling and certification based on national capacity to deliver a reliable , transparent, and economically feasible verification system</li> </ul>
	<b>Impact on Response Measures:</b> <ul style="list-style-type: none"> <li>National MAP Association</li> </ul>	<ul style="list-style-type: none"> <li>No such organisation</li> </ul>	<ul style="list-style-type: none"> <li>MAP Association established and facilitating broader</li> </ul>	<ul style="list-style-type: none"> <li>MAP Association mandate and activities</li> </ul>	<ul style="list-style-type: none"> <li>MAP Association will be representative for the whole</li> </ul>

	functional established and active		implementation of project objectives		MAP industry and other stakeholders / actors important to on going implementation of the project objectives and sustainability beyond the projects lifespan
	<ul style="list-style-type: none"> <li>Business management of the community based enterprises take into consideration the management plans for each project site</li> <li>Traders / processors conditioning purchase to sustainable harvesting practices</li> </ul>	<ul style="list-style-type: none"> <li>None</li> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Business plan for each community based enterprise by end of project</li> <li>At least 3 national manufacturing companies by end of project</li> </ul>	<ul style="list-style-type: none"> <li>Project reporting and monitoring</li> <li>Project review and assessments through stakeholder interviews and field validation</li> <li>Specification and purchase records of the community based enterprises</li> </ul>	<ul style="list-style-type: none"> <li>Proper labelling and certification based on national capacity to deliver a reliable, transparent, and economically feasible verification system</li> </ul>
<b>Outputs from Outcome 3:</b> 3.1 National MAP Association established to facilitate roles and partnerships important to on-going sustainable management of MAP resources in Lebanon 3.2 Guidelines on sustainable harvesting practices and/or conservation strategies agreed for each target species, training modules developed and widely applied 3.3 Certification system developed, agreed and put into practice 3.4 Regulative framework on collection, processing as well as on national and international trade developed 3.6 Consumer awareness for sustainably harvested products raised					
<b>Outcome 4:</b> Learning, evaluation, and adaptive management	<b>Impact on Response Measures:</b> <ul style="list-style-type: none"> <li>Annual updates of gender analysis, risk mitigation strategy and impact assessment</li> </ul>	<ul style="list-style-type: none"> <li>As described in Project Document</li> </ul>	<ul style="list-style-type: none"> <li>Results incorporated in the annual work plans</li> </ul>	<ul style="list-style-type: none"> <li>Annual work Plan</li> </ul>	<ul style="list-style-type: none"> <li>Qualified, experienced and affordable expertise available in the region</li> <li>Flexibility of project partners to react on new developments and Requirements</li> </ul>
<b>Outputs from Outcome 4:</b> 4.1 Monitoring programme established 4.2 Adaptive management and strategic planning system established 4.3 Lessons learned and impact data are gathered, documented and disseminated to key internal and external audiences					

## Annex VII: Organizational Structure of Project



## **Annex VIII: Field Visit Summary**

Field study mission started from 24<sup>th</sup> of June 2013. It started with overview meeting with UNDP Energy and Environment Programme chief Ms. Jihan Seoud, project site engineer Mr. Hady Baroud and project national expert Dr. Jihad Noun. On the same day, also had meeting with Dr. Afram-Project focal point and Director General of the Lebanese Agriculture Research Institute (LARI). On 25<sup>th</sup> June, visits to pilot sites were initiated with the visit to Mejdal Akkar where Terminal Evaluation Consultant had interaction with local collectors, local government authority and cooperative members. Evaluator also observed resource base and analysed regeneration situation of target species. On the 26<sup>th</sup> June evaluator visited Hsarat in the first half and interacted with collector, local authority and land owners. In the second half of 26<sup>th</sup> visited project sites of Assia where evaluator had interaction with Mayor, and also interacted with collectors and cooperative president and manager. On the 27<sup>th</sup> of June, evaluator had meeting at the Ministry of Agriculture with Ms. Ziena Tamim, Ms. Carla Jamous and Ms. Mona Assaf (Rangelands, Public Gardens & Protected Forests Service at the Ministry of Agriculture and members in the newly formed MAP National Steering Committee). Similarly, in the second half had meeting at Atayeb Al Rif Cooperative with Ms. May Traboulsi and Mr. Gaby Rahme. At the end of the day had debriefing with Johan Seoud in UNDP and also had Skype interaction with Ms. Maya Abboud, Project manager. On the 28<sup>th</sup> June, evaluator visited Atayeb Al Rif Cooperative and interacted with Ms. May Traboulsi. Similarly, on the same day also had meeting with Ms. Fatin Ghaise, Manager of Arz Al Shouf Nature Reserve.

Field visit also included observation of resource base, processing units and production centres of cooperatives. Interaction was not guided by predetermined questions.

## Annex IX: Project Deliverables

1. Categorized list of the most important wild Lebanese medicinal and aromatic plants (MAPs).
2. International market study for selected medicinal and aromatic plants (MAPs) in Lebanon (*Alceasps*, *Micromeriasps*, *Origanumsps*, *Satureiasps*, *Thymus sps*, *Viola sps*, *Thymbra spicata*, *Salvia fruticosa*, *Cyclotrichium organifolium*).
3. Assessment of suitability for sustainable wild harvesting for selected medicinal and aromatic plants (MAPs) in Lebanon (*Salvia fruticosa*, *Origanum syriacum*, *Althaea damascena*, *Cyclotrichium organifolium*, *Origanum ehrenbergii*, *Viola libanotica*, *Clinopodium libanoticum*).
4. National distribution surveys, mapping and population assessments for selected medicinal and aromatic plants (MAPs) in Lebanon (*Salvia fruticosa*, *Origanum syriacum*, *Althaea damascena*, *Cyclotrichium organifolium*, *Origanum ehrenbergii*, *Viola libanotica*, *Clinopodium libanoticum*, *Thymbraspicata*, *Saturejathymbra*).
5. Monographs for selected medicinal and aromatic plants (MAPs) in Lebanon (*Salvia fruticosa*, *Origanumsyriacum*, *Althaea damascena*, *Cyclotrichium organifolium*, *Origanum ehrenbergii*, *Viola libanotica*, *Clinopodium libanoticum*)
6. *Salvia fruticosa* “sage” population and species characteristics under wild conditions in Lebanon
7. *Origanum syriacum* “Oregano” population and species characteristics under wild conditions in Lebanon
8. IUCN Redlist conservation assessment reports for selected medicinal and aromatic plants (MAPs) in Lebanon (*Salvia fruticosa*, *Origanum syriacum*, *Althaea damascena*, *Cyclotrichium organifolium*, *Origanum ehrenbergii*, *Viola libanotica*, *Clinopodium libanoticum*).
9. Developing sustainable wild harvesting standards for *Salvia fruticosa* “sage” and *Origanum syriacum* “Oregano” in Lebanon
10. Developing sustainable wild harvesting standards for *Laurusnobilis* in Lebanon
11. Legal study on the existing institutional and legislative framework that affects the medicinal and aromatic plants (MAPs) sector in Lebanon
12. Ministerial Decision (179/1, 2012) and permit for the wild harvesting, transport and trade of sage and oregano in Lebanon
13. Draft decree for medicinal and aromatic plants conservation and management in Lebanon
14. Establishing national standard for “Zaatar” in Lebanon
15. Lebanese national standard (LIBNOR) for *Salvia fruticosa*
16. Sustainable wild harvesting training material for *Salvia fruticosa* “sage” and *Origanum syriacum* “Oregano” in Lebanon
17. “To keep on harvesting sage and oregano”: Training documentary on sustainable wild harvesting in Lebanon
18. Illustrated guideline for best practices in medicinal and aromatic plants (MAPs) harvesting and post harvesting
19. Illustrated identification guide for selected medicinal and aromatic (MAPs) plants in Lebanon
20. Selected medicinal and aromatic plants within the Medicinal plants project in Lebanon brochure
21. *Origanum syriacum* “Oregano” brochure
22. Management planning for medicinal and aromatic plants (MAPs) community based enterprises in Lebanon



23. Management of medicinal and aromatic plants (MAPs) community based enterprises with special emphasis on marketing and sales.
24. Enterprise/cooperative management plans for the four project pilot sites (Mejdel, Assia, Hsarat, Mrusti).
25. Good Hygiene practices (GHP) and Good Manufacturing Practices (GMP) training material for medicinal and aromatic plants (MAPs).
26. Developing a feasibility study for the cultivation of *Origanum syriacum* “Oregano” based on demonstration plots in Lebanon.
27. Business plan for *Origanum syriacum* “Oregano” community based enterprises.
28. Business plan for *Salvia fruticosa* “Sage” community based enterprises.
29. Business plans for the four project pilot sites (Mejdel, Assia, Hsarat, Mrusti).
30. Guideline for developing national management and monitoring plans for medicinal and aromatic plant in Lebanon: Case studies: *Salvia fruticosa* “sage” and *Origanum syriacum* “Oregano”.
31. Branding & packaging & labelling (Lebanese village products and Nabta).
32. Marketing tools (flyer, bags, business cards, posters).

## **Annex X: List of References**

- Project Identification Form (PIF)
- Project Document
- Log frame Analysis (LFA)
- Inception Report
- Mid Term Review Report
- Annual Work Plans
- Implementing/executing partner arrangements
- List and contact details for project staff, key project stakeholders, including Project Boards, and other partners to be consulted
- Project sites, highlighting suggested visits
- Financial Data
- Project budget, broken out by outcomes and outputs
- Project implementation reports (PIR) 2008-2012
- GEF SO2 Biodiversity tracking tool (2008-2012)
- Final project report
- Final technical report
- Experts progress reports:
  - National conservation expert
  - International conservation expert
  - Marketing & Capacity Building expert
- Awareness material (leaflets, brochures)
- Training material (Illustrated identification guide for the project target species,
- Training documentary on sustainable wild harvesting of sage and oregano
- IUCN conservation assessments for the project target species
- Business plans for project pilot sites
- Business plan for sage and oregano production lines
- Management plans for the project pilot sites
- Medicinal and Aromatic Plants legal study
- Rapid International market study for project targets species

## Annex XI: Evaluation Questions

<b><u>Evaluation Criteria/Questions</u></b>	<b><u>Indicators</u></b>	<b><u>Sources</u></b>	<b><u>Methodology</u></b>
<b>Relevance:</b> How does the project related to the main objective of the GEF focal area, and to the environment and development priorities at the local, regional and national level? a) How have the project beneficiaries been satisfied with the project deliverables and outcomes? b) How has the environment benefited from the project deliverables? c) What have been the important and successful Integrated Conservation and Development (ICD) programs implemented by the project?	<ul style="list-style-type: none"> <li>• Project objectives and activities related to objective of GEF focal area and priorities at national, local and regional level</li> <li>• Consistency and contribution to GEF focal area objectives and to national development strategies</li> <li>• Stakeholder views of project significance and potential impact related to the project objective</li> </ul>	<ul style="list-style-type: none"> <li>• Project documents, report vs GEF document</li> <li>• Interview with authorities at different level</li> <li>• Field assessment for evidence</li> <li>• Talking to beneficiaries</li> </ul>	<ul style="list-style-type: none"> <li>• Project report review in the light of GEF document</li> <li>• Interviews with relevant personnel</li> <li>• Focus group discussion</li> <li>• Field Observation</li> </ul>
<b>Effectiveness:</b> To what extent have the expected outcomes and objectives of the project been achieved? a) What has been achieved against the intended project objectives (initial objectives)? b) What are the reported achievements, and facts on the ground?	<ul style="list-style-type: none"> <li>• Level of achievement of expected outcomes or objectives to date</li> <li>• Long term changes in management processes, practices and awareness that can be attributable to the project</li> <li>• Stakeholder views of project significance and potential impact related to the project objective</li> </ul>	<ul style="list-style-type: none"> <li>• Change in the ground situation of the target species</li> <li>• Conservation arrangements in the ground</li> <li>• Change in attitude of the stakeholder from policy level to ground level collectors</li> </ul>	<ul style="list-style-type: none"> <li>• Field assessment</li> <li>• Review of project documents</li> <li>• Interaction with the policy level people to ground level collectors.</li> <li>• Focus group discussion</li> <li>• Interview</li> </ul>
<b>Efficiency:</b> Was the project implemented efficiently in-line with international and	<ul style="list-style-type: none"> <li>• Reasonableness of the costs relative to scale of outputs generated</li> </ul>	<ul style="list-style-type: none"> <li>• Financial statements</li> <li>• Project structure and</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis of financial statements.</li> </ul>

<p>national norms and standards?</p> <p>a) Has the project done what it was set for?</p> <p>b) How the realized outputs were delivered or why expected outputs failed in some cases?</p> <p>c) What and why the proposed changes are needed?</p>	<ul style="list-style-type: none"> <li>• Efficiencies in project delivery modalities Consistency and contribution to GEF focal area objectives and to national development strategies</li> <li>• Changes in project circumstances that may have affected the project relevance and effectiveness</li> <li>• Lessons learned about the best practices</li> </ul>	<p>function</p> <ul style="list-style-type: none"> <li>• Project document and annual reports</li> <li>• Experience of project staffs and other relevant stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis of project structure and functionalities</li> <li>• Analysis of project circumstances in project document (past and present)</li> <li>• Interaction with relevant stakeholders</li> </ul>
<p><b>Sustainability:</b> To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results?</p> <p>a) What has been put in place to ensure continuity of the project (financial, institutional arrangement, social-economic programs)?</p> <p>b) What are the environmental risk assessments to sustain long term project result put in place to sustain the project in future?</p>	<ul style="list-style-type: none"> <li>• Degree to which outputs and outcomes are embedded within the institutional framework (policy, laws, organizations, procedures)</li> <li>• Implementation of measures to assist financial sustainability of project results</li> <li>• Future co-funding agreement or intent</li> <li>• Observable changes in attitudes, beliefs and behaviours as a result of the project</li> <li>• Measurable improvements from baseline levels in knowledge and skills of targeted staff/collectors, cooperative members etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Project report</li> <li>• Observation in the field</li> <li>• Interview with stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Review of project reports.</li> <li>• Observation in the field to see impact on the ground</li> <li>• Interaction with stakeholders</li> </ul>

<p><b>Impacts:</b> Are there indications that the project has contributed to, or enabled progress towards reduced environmental stress and/or improved ecological status?</p> <p>a) What difference has the project made to-date?</p> <p>b) What are the projected outcomes of the outputs (income, food security, environment protection, socio-economic development, climate change resilient communities, biodiversity conservation, behaviour change, and gender roles), registered?</p> <p>c) How can the impact be improved?</p>	<ul style="list-style-type: none"> <li>• Resource management plan implemented in each project pilot sites</li> <li>• Local collectors are now aware on collection methods and management.</li> <li>• Activating local collectors and involving them in the collection and primary processing of commercially viable target species collected from project sites helped to establish local stakeholders for the conservation of MAPs of global significance.</li> <li>• Status of 2 globally-threatened MAP species improved as good regeneration taking place at ground.</li> <li>• Information on status and distribution of other important MAP species was also satisfactory.</li> <li>• MAPs regulation legalised their conservation.</li> <li>• Measurable improvements from baseline levels in knowledge and skills of targeted staff/collectors, cooperative members etc.</li> <li>• Measurable improvements from</li> </ul>	<ul style="list-style-type: none"> <li>• Project Reports</li> <li>• Interview with local collectors.</li> <li>• Interview with cooperatives.</li> <li>• Interview with local authority</li> <li>• Observation in the field.</li> </ul>	<ul style="list-style-type: none"> <li>• Review of project reports/documents.</li> <li>• Interaction with local communities, collectors, local authorities.</li> <li>• Field observation.</li> </ul>
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	<p>baseline levels in the planning and management functions of the responsible organizations that were targeted by the project.</p> <ul style="list-style-type: none"> <li>• No more external collectors to collect target species.</li> </ul>		
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## Annex XII: Evaluation Consultant Agreement Document

### ANNEX E: EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM

#### Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form <sup>1</sup>	
Agreement to abide by the Code of Conduct for Evaluation in the UN System	
Name of Consultant:	<u>Arun Rijal</u>
Name of Consultancy Organization (where relevant):	_____
I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.	
Signed at <u>place</u>	 Kathmandu, 20 May 2013
Signature:	_____

<sup>1</sup>[www.unevaluation.org/unegcodeofconduct](http://www.unevaluation.org/unegcodeofconduct)



## Annex XIII: Evaluation Criteria

### i) Criteria used to evaluate the Project by the Final Evaluation Team

<b>Highly Satisfactory (HS)</b>	Project is expected to achieve or exceed <b>all</b> its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as “good practice”.
<b>Satisfactory (S)</b>	Project is expected to achieve <b>most</b> of its major global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings.
<b>Marginally Satisfactory (MS)</b>	Project is expected to achieve <b>most</b> of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve <b>some</b> of its major global environmental objectives or yield some of the expected global environment benefits.
<b>Marginally Unsatisfactory (MU)</b>	Project is expected to achieve <b>some</b> of its major global environmental objectives with major shortcomings or is expected to achieve only <b>some</b> of its major global environmental objectives.
<b>Unsatisfactory (U)</b>	Project is expected <b>not</b> to achieve <b>most</b> of its major global environment objectives or to yield any satisfactory global environmental benefits.
<b>Highly Unsatisfactory (U)</b>	The project has failed to achieve, and is <b>not</b> expected to achieve, <b>any</b> of its major global environment objectives with no worthwhile benefits.

### ii) Scale used to evaluate the sustainability of the Project

Likely (L)	There are no risks affecting this dimension of sustainability.
Moderately Likely (ML)	There are moderate risks that affect this dimension of sustainability.
Moderately Unlikely (MU)	There are significant risks that affect this dimension of sustainability.
Unlikely (U)	There are severe risks that affect this dimension of sustainability.

### iii) Rating scale for outcomes and progress towards “intermediate states”

Outcome Rating	Rating on progress toward Intermediate States
<b>D:</b> The project’s intended outcomes were not delivered	<b>D:</b> No measures taken to move towards intermediate states.
<b>C:</b> The project’s intended outcomes were delivered, but were not designed to feed into a continuing process after project funding	<b>C:</b> The measures designed to move towards intermediate states have started, but have not produced results.
<b>B:</b> The project’s intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding	<b>B:</b> The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long term impact.
<b>A:</b> The project’s intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding.	<b>A:</b> The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long term impact.

**NOTE:** If the outcomes above scored C or D, there is no need to continue forward to score intermediate stages given that achievement of such is then not possible.

### iv) Rating scale for the “overall likelihood of impact achievement”.

Highly Likely	Likely	Moderately Likely	Moderately Unlikely	Unlikely	Highly Unlikely
AA AB BA BB+	BB AC+ BC+	AC BC	AD+ BD+	AD BD C	D