



LEBANON REFORESTATION INITIATIVE II

Final Performance Evaluation Report

Performance Management and Support Program for Lebanon
(PMSPL II)

This publication was produced at the request of the United States Agency for International Development. It was prepared by Robert Primmer, Belal Al Ayoubi, Jad Abou Arrage, and Joanna Khater of Social Impact, Inc.

Note: Limited redactions have been made to this version of the report in accordance with the principled exceptions to the presumption in favor of openness established in OMB Bulletin 12-01, "Guidance on Collection of U.S. Foreign Assistance Data."

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Cover Photo: Bilal Al Ayoubi SI - Al Makmel highlands which hosts Lebanon's highest peak with LRI's field team vehicle heading towards a Cedars Tree reforestation site that was planted in phases 1 and 2 of the program.

November 2018

This document was submitted by Social Impact, Inc. to the United States Agency for International Development under USAID Contract/Order No. AID-268-C-15-00001.

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ABSTRACT

This evaluation assesses the relevance, effectiveness, sustainability, and gender integration of the Lebanon Reforestation Initiative – Phase II (LRI II). The project aimed to leverage reforestation in Lebanon as a common cause to rally diverse Lebanese and Syrian refugee communities in Lebanese villages to promote development and social stability. The evaluation used a mixed-methods approach that included review of project documentation and data collected from interviews with project stakeholders. The evaluation’s findings indicate that LRI II implemented the agreed work plan and exceeded several Monitoring, Evaluation, and Learning Plan indicators. The nursery activity and the technical outputs of the project’s reforestation and out-planting components were extremely effective, relevant, and sustainable and were the project’s most substantial achievements. The operational aspects¹ of the reforestation out-planting and forest management component were found not sustainable because future funding was uncertain, and the project was not designed to meet the greater community’s immediate needs. The overall goal of social stability was achieved, but only with direct project beneficiaries and not with a wider community. The fire prevention activity did not achieve its ultimate purpose because of legal barriers to removing undergrowth fuel material and pruning practices. The climate change activities (quarry rehabilitation and landslide prevention) were not completed at the time of the evaluation, so it was difficult to gauge how effective they would be. The project fulfilled the mission’s gender integration requirements.

¹ We refer to the “operational aspects” as the components of the project that involve the actual planting of the trees, and the maintenance of the areas that have been reforested over the course of the project.

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ACRONYMS

AFDC	Association for Forests, Development, and Conservation
ARDP	Agriculture and Rural Development Program
AUB-NCC	American University of Beirut – Nature Conservancy Center
CDCS	Country Development Cooperation Strategy
CLA	Collaboration, Learning, and Adaptation
CPC	corridor planning committee
CNTPL	Cooperative of Native Tree Nurseries in Lebanon
CSR	corporate social responsibility
EC	environmental committee
FAO	Food and Agriculture Organization
FAO-FLRM	Food and Agriculture Organization – Forest and Landscape Restoration Mechanism
GIS	Geographic Information Systems
GPS/IMU	Global Positioning System/Inertial Measurement Unit
LAF	Lebanon Armed Forces
LAF-CIMIC	Lebanon Armed Forces – Civil – Military Cooperation Directorate
LIVCD	Lebanon Industry Value Chain Development
LRI	Lebanon Reforestation Initiative
M&E	monitoring and evaluation
MOA	Ministry of Agriculture
MOE	Ministry of Environment
MOU	memorandum of understanding
NGO	nongovernmental organization
PAPA	Participating Agency Project Agreement
PMSPL	Project Management and Support Program for Lebanon
SEC	social and environmental corridor
SEPT	Save Energy Plant Trees
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TCP	technical support program
UAV	Unmanned Aerial Vehicle
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USFS	United States Forestry Service
USP	University Scholarship Program

EXECUTIVE SUMMARY

EVALUATION PURPOSE

This final performance evaluation assesses Lebanon Reforestation Initiative II's (LRI II's) activities for their relevance, effectiveness, gender balance, and sustainability to help the United States Agency for International Development (USAID) better assess project outputs and to highlight lessons learned to inform future USAID/Lebanon programming and project design.

PROJECT BACKGROUND

LRI II is a \$6,999,313 three-year activity extending from June 2015 to June 2018, implemented through Modification No. 7 to the original Participating Agency Project Agreement (PAPA) agreement (PAPA no. AID-268-P-00-10-00046/ Modification No. 7) by the U.S. Forest Service (USFS). The end date of the project was extended until December 30, 2018, through Modification No. 14 to the PAPA agreement.

EVALUATION QUESTIONS

In accordance with ADS 201.3.5.12, the evaluation questions are organized in the following areas:

Relevance

- 1) To what extent are the LRI activity and the technical assistance provided under it, relevant to the needs of people in rural communities in terms of building social stability and improving the sustainable management of resources?

Effectiveness

- 2) How and to what extent has the activity achieved planned results in terms of: reversing environmental degradation by reforesting grasslands, shrub-lands, and areas burned by wildfires; engaging the community to protect its environment; and engaging the private sector through native tree nurseries and support for out-planting?

Gender

- 3) Did LRI create/enhance more active environmental awareness and economic involvement among women in the communities where the activities were implemented?

Sustainability

- 4) What is the likelihood that the results LRI has achieved are sustainable beyond the life of the activity?

Recommendations

- 5) What recommendations does USAID need to consider for future programming?

EVALUATION METHOD

This evaluation used mixed methods to collect and analyze primary and secondary data. Secondary data included project documentation, workplans, progress reports, technical reports, the project website, and online reforestation mapping tools. Primary data were collected at selected project sites through interviews with project stakeholders, participants, donors, and beneficiaries; direct onsite observation; and additional key informant interviews (KIIs). An evaluation matrix was used for data analysis. Dedoose qualitative analysis software was used for the overall analysis. Fieldwork occurred from October 18 through November 9, 2018, in six regions in Lebanon.

KEY FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Relevance

Question 1: To what extent are the LRI activity and the technical assistance provided under it, relevant to the needs of people in rural communities in terms of building social stability and improving the sustainable management of resources?

Findings

- Key informants and project documents confirmed that all project activities are aligned with the six objectives of the National Forest Plan; the main objective of the National Reforestation Initiative (40-million-tree initiative); and USAID/Lebanon's Country Development Cooperation Strategy (CDCS) objectives: governance and democracy and economic growth, including CDCS IR 1.3 *Improved governance in addressing citizens' needs in public service delivery*, CDCS IR 1.4 *Strengthened civil society contributing effectively to participatory and democratic governance*, and CDCS IR 2.1 *Increased private sector competitiveness and Lebanon's National Forest Plan objectives*.
- LRI met and exceeded the targets set in the workplan (see Annex 7), except in the following cases:
 - The initial development of the Shouf area as a social and environmental corridor (SEC) was shelved because the reserve's management felt they already had community mechanisms in place and preferred to work directly with the project, rather than have the project work directly with communities.
 - Twinning was shelved and replaced by the development of SECs to scale up the area of impact.
- The 2016 municipal elections and the subsequent changes in the councils caused delays and minimal alterations, but in general the workplans stayed relevant.
- The interventions were largely driven by the project and not based on an unbiased preliminary community needs assessment.

Conclusions

- LRI's goals, purposes, and results are aligned with USAID/Lebanon's CDCS, the National Forest Plan, and the Lebanon National Reforestation Initiative.
- LRI implemented the approved workplan. The SECs expanded LRI's area of influence by increasing stakeholder capacity, involving more municipalities in project activities, and expanding the area earmarked for long-term reforestation.

Effectiveness

Question 2: How and to what extent has the activity achieved planned results in terms of: reversing environmental degradation by reforesting grasslands, shrub-lands, and areas burned by wildfires; engaging the community to protect its environment; and engaging the private sector through native tree nurseries and support for out-planting?

Findings

Major achievements in reversing environmental degradation include:

- Coordinating efforts to develop nationally accepted, scientifically developed seed production and out-planting protocols resulting in improved seedling quality and out-planting survival rates with

a range of stakeholders, including local nongovernmental organizations (NGOs), academia, and the donor community.

- The number of hectares (441 hectares) and seedlings (251 938 seedlings) planted in LRI II
- The increased capacity of the Cooperative of Native Tree Nurseries in Lebanon (CNTPL) to produce a higher number of high-quality seedlings and the development of larger markets for high-quality native seedlings.
- Raising local, regional, and national awareness of environmental issues and reforestation.
- Creating corridor planning committees (CPCs) to manage the SECs and providing them with capacity building in reforestation and forest management. LRI also trained and hired local community members to implement the out-planting and maintenance of the seedlings. This engagement was however, limited to direct project beneficiaries and did not include the wider community.
- Developing the CNTPL and its organizational and marketing capacity.
- Cooperating with 19 private sector companies (2 more than the planned 17) and raising \$169,142 for out-planting activities (although the cost-effectiveness of the exercise was very low).

Conclusions

- The project achieved and exceeded its planned results in reversing environmental degradation through reforestation.
- The project succeeded in engaging local communities in reversing environmental degradation.
- LRI's technical achievements are now recognized as a national reference in the field of reforestation. This recognition has played a large role in improving the effectiveness of reversing environmental degradation.
- The project achieved the planned objectives in terms of providing support to native nurseries and engaging with private sector donors.
- Only a small number of individuals within diverse communities (direct project participants and beneficiaries) have been brought together to work toward the common goal of environmental protection. The larger community was not engaged in decision making and project activities.
- The project has achieved its intermediate results of reforestation, but it is still too early to determine the effect of these results on reducing environmental degradation.

Gender

Question 3: Did LRI create/enhance more active environmental awareness and economic involvement among women in the communities where the activities were implemented?

Findings

- Interviewees throughout the evaluation indicated that including women in interventions was never a problem and that women took on leadership roles with ease. The CPCs were dominated by women and a woman was elected as the head of the CNTPL. Women were included in all paid positions, including in out-planting activities. Two women were employed as enforcement rangers in the North SEC.
- Female KIs indicated that the project had increased their awareness about issues of environmental degradation and said that “these were issues that were not considered by women in the villages before the LRI project.”

Conclusions

- Women played a major leadership role in reforestation, especially in environmental education and awareness.
- Women's participation was not an issue in most communities or activities except those involving heavy labor, such as quarry restoration. Women were included at all levels of project implementation, in accordance with USAID gender requirements.
- Women became more aware of environmental issues as a result of LRI.

Sustainability

Question 4: What is the likelihood that the results LRI has achieved are sustainable beyond the life of the activity?

Findings

- A high level of capacity has been developed in project nurseries, including the capacity of the CNTPL to manage and market high-quality seedlings. The National Reforestation Campaign has also enhanced market demand.
- Periodic turnover of elected individuals² in municipalities make it difficult to implement long-term planning. Also, CPC positions are voluntary, and access to funding remains uncertain because of difficulty converting to NGO status.
- Private sector involvement in funding reforestation depends on Lebanon's economic climate, continued engagement by the LRI NGO, and the ability to market reforestation as a benefit to CSR and Lebanese company compliance requirements.
- It is extremely expensive to implement the project's climate change and quarry restoration components and funding is difficult to access.
- The successful implementation of the project's Firewise component is hindered by the legal framework for forest management. The availability of funding for forest fire management is uncertain.
- The LRI NGO is now entrenched as the go-to organization for reforestation for donors.
- The reforestation component's national guidelines have been adopted by public and private organizations.
- GIS and mapping systems developed by the project are relevant to reforestation planning at the national level and are now being used by multiple civil society entities to approach donors and attract new funds.
- Permanent and short-term, seasonal reforestation jobs were very beneficial because they complemented the target communities' agricultural activities and constituted an additional source of income during the agricultural off-season in rural areas. However, heads of municipalities indicated that they would not be able to fund ongoing activities due to other, higher-priority municipal activities.
- Women were the dominant drivers in all project components, especially in nursery management and corridor planning committees.

² The fact that some of the newly-elected officials may not support reforestation threatens to undermine the work already done with reforestation in areas under their control as well as future efforts towards reforestation

Conclusions

The prospects of medium- to long-term sustainability differed among project components:

- The LRI NGO has a medium to high prospect of sustainability as it has positioned itself as the go-to organization for reforestation in Lebanon.
- The technical components of reforestation, including planting site selection, species selection, planting practices, and post-planting site management, have a high likelihood of sustainability because of the sound science used in their development and their adoption at the national level by the government, NGOs, academia, and donors.
- The project's nursery components have a medium to high likelihood of sustainability because of the technical capacity that has been developed and the high possibility of continued demand for high-quality native seedlings in the medium term.
- The project's climate change components have a low likelihood of sustainability because of the expense of quarry restoration and the lack of progress toward project outcomes for the landslide component (although LRI indicated that they would complete the landslide activity in the last month of 2018).
- The project's fire prevention component has a low likelihood of sustainability because of barriers created by Lebanon's legal framework for forest management and the lack of funding for implementation indicated by municipal leaders.
- Private sector engagement in funding reforestation is sustainable, but it needs a change of engagement strategy by the LRI NGO.
- Women will continue to play a major role in future projects in forest management with different levels of involvement depending on target areas and type of activities.

Recommendations

Question 5: What recommendations does USAID need to consider for future programming?

- The project design did not respond to communities' highest-priority needs—economic growth, as indicated by municipal members and all respondents. Therefore, economic opportunity should be built into the design to ensure clear commercial returns from reforestation (e.g., registration and validity of the project in the Voluntary Carbon Standard [VCS] and Climate Community and Biodiversity Alliance [CCBA] to sell sequestered carbon on the voluntary market [currently valued at around \$7–15 per ton sequestered]). Most respondents also indicated that heating was expensive in the winter (especially for Syrian refugee communities), so it would have been prudent to include fast-growing beneficial species into the mixed planting that have commercial value in the short term (e.g., charcoal production).
- Engage more extensively with the national government to address the barriers caused by legal frameworks.
- Increase funding for communication and outreach and use professional organizations with large networks for communication purposes.
- Target smaller geographic areas to test the concept over the whole project cycle before expanding to large geographic areas.

- Engage the government and the companies responsible for quarries in the rehabilitation efforts (companies should be held responsible for rehabilitation).
- Research and pilot cheaper options for landslide rehabilitation and prevention.
- Given the fact that social stability is such a complex problem in Lebanon, experienced social stability and conflict resolution expertise should be engaged in project design and implementation. For instance, a thorough conflict analysis whereby key stakeholders are engaged in a conflict sensitive manner to identify key tension triggers shall precede any intervention that aims to enhance social stability. The conflict analysis should entail a desk or literature review to understand the situation in the targeted community especially if the program is not poised to produce its own literature. And since reforestation is usually not a rapid intervention and entails a medium to long term coordination and engagement with local communities, these communities can be engaged in longer term processes such as Local Systems Analysis for instance, or any other type of process that allows the implementer to facilitate sensitive or tough discussions about tension triggers and conflicts. Moreover, the role of the facilitator or mediator is essential in the process through making sure that the different parties represented or engaged are taking part and being listened to. The mediator facilitates the communications between the parties with the aim of reaching common grounds and in the case of this project a common vision of how to manage the implementation as well as the sustainability of this investment.
- The design of future programs should include further assessments prior to implementing any task. For instance, better results could have been achieved should LRI have completed the following assessments (which were not in their mandate):
 - 1) In-depth community needs assessments and stakeholder analyses to adapt project designs and meet real needs³ rather than perceived or introduced needs;
 - 2) Detailed company corporate social responsibility (CSR) profile assessments so that fundraising efforts are more targeted at contributing to companies' CSR certification requirements (such as emission reduction); and
 - 3) Internationally accepted, detailed, and in-depth conflict analysis in each municipality or locality to identify flare points and triggers of instability.

³ All community members that were interviewed indicated that reforestation was low on their list of priority needs and in fact income and access to clean water were at the top of the list. Knowing this, the project should have been designed to meet these immediate needs “e.g. . besides the short-term employment that was created through the project, the design could have included mixed species planting of native species coupled with harvestable species.

INTRODUCTION

PROJECT DESCRIPTION

Activity Name	Lebanon Reforestation Initiative II
Acronym	LRI II
Purpose I	Diverse communities brought together and supported to provide stewardship over their shared social and environmental corridors, support twinning neighboring communities within those corridors, and engage Syrian refugees in addressing common environmental issues.
Purpose II	Watershed protection, rural economic development and livelihood gains for sustainable communities supported through enhanced and expanded reforestation.
Purpose III	Communities empowered to anticipate, and protect themselves from, economic and environmental threats posed by wildfires, quarries, and climate change impacts.
Start Date	June 2015
End Date	December 2018
Budget	USD \$6,999,313
Grantee	United States Forestry Service (USFS)
PAPA Agreement #	AID-268-P-00-10-00046/ Modification No 7

CONTEXT

ACTIVITY DESCRIPTION

LRI I was completed in June 2015 with a total of \$12.6 million in funding. In July 2015, LRI started the implementation of phase 2, a new, three-year, \$7 million program implemented by the U.S. Forest Service (USFS) through a Participating Agency Partnership Agreement (PAPA) with the United States Agency for International Development (USAID) (PAPA no. AID-268-P-00-10-00046/Modification No. 7). The USFS's Office of International Programs worked in close partnership with USAID/Lebanon to implement LRI II. This phase of the project included only one implementing mechanism.

ACTIVITY INSTITUTIONAL CONTEXT

The Lebanon Reforestation Initiative (LRI) Activity was implemented by the USFS Office of International Programs, located in Washington, D.C., through a local team operating from the LRI office in Hazmieh, Lebanon. LRI is also registered in Lebanon as a local nongovernmental organization (NGO).

LRI adopted a grassroots approach to participatory reforestation practices. LRI's partners included reforestation NGOs; municipalities; unions of municipalities; the Cooperative of Native Tree Producers of Lebanon (CNTPL); the Lebanese Ministries of Agriculture (MOA) and Environment (MOE); and several institutions, universities, and individual experts working on forestry research. LRI also partnered with private sector companies to leverage funding for reforestation.

(See Annex 3: Results Framework)

PROJECT ACTIVITY DESCRIPTION

The core goal of LRI's first phase was to develop an efficient and cost-effective method for the reforestation of Lebanon's degraded and historically deforested lands. The second phase's core goal was to create an environment that would contribute to improved social stability and sectarian harmony. LRI approached this daunting task by introducing the reforestation techniques, practices, and successes developed in the first phase to multiple communities with sectarian differences as well as to communities hosting Syrian refugees as a nonthreatening opportunity to work toward a common purpose.

The phased approach included 1) creating entities where communities across sectarian divides could engage with each other to develop and implement strategies to connect their public lands with forests; 2) developing the capacity of communities to forest the land and create paid jobs, hence contributing to rural development and livelihood gains; and 3) developing the capacity of communities to deal with environmental threats—specifically, wildfires, environmental degradation by quarries, and climate change (see Annex 2 for a detailed description of the project's activities).

Project Activities



DEVELOPMENT HYPOTHESIS

LRI II was based on the theory that community-led landscape restoration activities could serve as a vehicle to build social stability and promote sectarian harmony in host communities through education; capacity building; twinning diverse communities; and strengthening communities to face adverse situations, such as wildfires, environmental degradation by quarries, and climate change.

In addition, LRI II aimed to amplify the program's socioeconomic benefits, focusing on diverse sectarian communities, especially host communities hardest hit by the Syrian refugee crisis. Such benefits include 1) social outcomes, such as stronger inter- and intracommunity relations, stronger local institutions and civic groups engaged in service provision, increased involvement of women in local decision making, and increased youth civic engagement; and 2) economic benefits related to seasonal job creation, workforce development in reforestation and ancillary activities (pruning, irrigation, etc.), and strengthened value chains for selected tree species.

EVALUATION PURPOSE AND QUESTIONS

This final performance evaluation, prepared by Social Impact, Inc. (SI), examines LRI's outcomes, highlights lessons learned, and provides recommendations for future USAID/Lebanon programming and project design. As requested by the Mission, the evaluation also analyzes LRI's impact on the reforestation sector. In addition, the evaluation addresses gender as a cross-cutting element of all activities and shows the extent to which LRI adhered to USAID's gender integration requirements. In the spirit of Collaboration, Learning, and Adaptation (CLA), project stakeholders participated in reviewing the findings and making recommendations.

The evaluation addresses the following questions drafted by USAID/Lebanon in the initial scope of work (SOW) and finalized by the evaluation team in collaboration with USAID/Lebanon.

RELEVANCE

- I) To what extent are the LRI activity and the technical assistance provided under it relevant to the needs of people in rural communities in terms of building social stability and improving the sustainable management of resources?

Subquestions:

- a) To what extent were the activity's goals, purposes, and objectives/results aligned to support the country's national reforestation strategy and USAID's Country Development Cooperation Strategy (CDCS)?
- b) To what extent did LRI conduct activities in line with their approved workplan (de facto vs de jure)? (Were they able to do what they set out to do?)
- c) To what extent did the activity's technical assistance answer and/or address the real needs in the intervention areas?

EFFECTIVENESS

- 2) How and to what extent has the activity achieved planned results in terms of: reversing environmental degradation by reforesting grasslands, shrub-lands, and areas burned by wildfires; engaging the community to protect its environment; and engaging the private sector through native tree nurseries and support for out-planting?

Subquestions:

- a) What are LRI's headline outcomes and achievements? How have they been documented and analyzed?
- b) To what extent has the activity achieved its outcomes and stated purposes?
- c) What are the main factors that positively or negatively influenced LRI's ability to achieve these purposes?
- d) What impact did LRI have on the reforestation sector—specifically, through:
 - Reversing environmental degradation by reforesting grasslands, shrublands, and areas burned by wildfires?
 - Community engagement to protect its environment?
 - Private sector engagement through native tree nurseries and support for out-planting?
 - LRI NGO engagement in native tree nurseries?
 - Advanced planting techniques, resulting cost/benefit, and out-planted seedling survival on reforestation?

- e) What evidence is there that social stability has improved as a result of reforestation projects in identified communities?
- f) Which aspects of the program were relatively more, or relatively less, cost-effective toward achieving the activity's goal?
- g) How effective were LRI's outreach and communication? How was publicity generated for USAID and the broader Embassy by the activity?

GENDER

- 3) Did LRI create/enhance more active environmental awareness and economic involvement among women in the communities where the activities were implemented?

Subquestions:

- a) Did women actively participate in local decision making—e.g., in the municipal environment committees?
- b) Were women encouraged to take on leadership roles in local forest area management?

SUSTAINABILITY

- 4) What is the likelihood that the results LRI has achieved are sustainable beyond the life of the activity?

Subquestions:

- a) How sustainable are LRI's activity results likely to be in the medium to long term?
- b) Which results show the most prospect of being sustained and why?
- c) To what extent has the sustainable management of natural resources been developed?
- d) How sustainable are the permanent jobs created by the activity? What is the benefit of the short-term seasonal jobs that LRI produces?
- e) Which aspects of LRI's activities are, or are likely to be, the most scalable (i.e., replicable at a declining marginal cost as uptake increases)?
- f) What aspects of the program demonstrate women's sustainable participation beyond the life of the activity?

RECOMMENDATIONS

- 5) What recommendations does USAID need to consider for future programming?

Subquestions:

- a) What were the critical challenges and lessons learned from this program?
- b) How could the activity design be enhanced to improve the sustainability of LRI's results, and what additional programming or support in the upcoming years would improve this sustainability?
- c) What is the best way for USAID to tweak future programs in a way that fits both environmental and social goals?
- d) How can the adopted approach be developed to increase women's participation in similar future projects?

METHODS AND LIMITATIONS

DATA COLLECTION

This evaluation relies on the review of project documentation (such as workplans; quarterly reports; annual reports; the monitoring, evaluation, and learning (MEL) plan; and technical reports); data collected through monitoring and evaluation visits; and interviews with the Mission, project staff, project beneficiaries, and other stakeholders. Direct observations were employed to inform the evaluation. These approaches provided the evaluation team with adequate information to assess the project's implementation and results against its objectives, scope of work, deliverables, workplan, and so forth. The evaluation team, in collaboration with USAID staff, finalized the overall evaluation methodology during a briefing at the Mission on October 17, 2018.

DOCUMENT REVIEW

The evaluation team reviewed documents, including the USAID CDCS; contract modifications; quarterly reports; and all other reports produced by USAID, SI, and USFS (see Annex 7 for a complete list of team-reviewed documents). This review helped evaluators gain knowledge of service delivery mechanisms, quality of project results, compliance with USAID CDCS, fulfillment of the development hypothesis, quality of program management, and achievement of project targets. The desk review provided the basis for formulating the final set of questions and determining the key informant interview (KII) and focus group discussion (FGD) participants.

DIRECT OBSERVATION

Direct observations were carried out at a cross-section of the project's forested sites and nurseries (see map 1). In addition, evaluators reviewed the policies and procedures provided to beneficiaries to observe how they have institutionalized LRI II interventions in their workplaces.

KEY INFORMANT INTERVIEWS

The team designed and utilized an interview guide (see Annex 8) to conduct KIIs with LRI's staff and other stakeholders to obtain a more detailed, in-depth understanding of specific issues. The interview questions derived from evaluation questions on relevance, effectiveness, and sustainability.

The evaluation team conducted interviews between October 25, 2018, and November 19, 2018. Evaluations took place across a selection of LRI implementation sites throughout Lebanon, including Beirut (see Annex 4). The evaluators conducted interviews with 75 individuals in 13 municipalities. KIIs were conducted with all implementing partners, service providers, and NGOs. These KIIs enabled the evaluation team to explore informants' experience with training and support through LRI II, as well as experience with the project's various components. Interviews were also carried out with LRI II's "focal points" for each component.

Interviews were conducted with multiple municipalities in each of the SECs. Where possible, the evaluators conducted municipality KIIs in or near the municipalities where FGDs were held to save time. Additional KIIs were conducted with municipalities involved in implementing LRI II's activities that are not part of the SECs. Interviews were also conducted with the Shouf Reserve's manager.

FOCUS GROUP DISCUSSIONS

The evaluators used an FGD guide (Annex 8) with questions derived from the evaluation questions. They conducted seven FGDs in the two SECs in addition to Mhaidse and Mdoukha. Each of the seven FGDs had between two and seven participants, with a total of 32 participants. Men and women were mixed. The FGDs were conducted in Arabic and moderated by a Lebanese member of the evaluation team, with another team member taking notes.

DATA ANALYSIS

DATA ANALYSIS METHODS

The data gathered from the desk review, direct observations, KIIs, and FGDs were used as the basis for data analysis. KII and FGD information was captured in data analysis matrices to track the responses. The data analysis techniques included:

- Conceptualizing, coding, and categorizing information obtained through KIIs and FGDs.
- Using **content analysis** of collected KII and FGD data to identify and highlight notable examples of LRI II successes (or lack thereof) that have contributed to (or inhibited) the project's goals.
- Using **contribution analysis** to provide evidence that LRI II activities have contributed to the positive, documented results identified by the team.
- Using **comparative analysis** to examine relationships and results across activity components, activities, and achievements as revealed by stakeholders.
- Using **trend analysis** to examine LRI II indicators over time to identify patterns of convergence (or divergence) of activity outputs and outcomes toward the program's objectives.
- Using **gap analysis** to examine which aspects of LRI II, if any, fell short of anticipated performance and the likely factors behind these gaps.
- Authenticating conclusions by triangulating the data obtained from different sources (see below).

The evaluation team also prepared a data source matrix (Annex 9) that clarifies how the data were collected. It includes the evaluation questions, the evaluation tools, data sources, and an analysis plan for each question. This matrix ensured that a multitude of data sources were considered and that the team was able to triangulate the data to answer each question. Triangulation enabled the team to cross-verify and cross-validate the findings that emerged from using the above-mentioned methods and data sources to identify correlations between findings and determine overall program effectiveness. Specifically, the team used methodological triangulation to develop parallel protocols with the same or similar questions across its KIIs and FGDs, which in turn enabled the team to validate or refute findings across both methods.

GENDER AND SOCIAL ANALYSIS PLAN

The evaluation team proposed using Evaluation Question 3 to provide a full analysis of the extent to which LRI II has fulfilled the Mission's gender integration requirements. The Mission consented to the team's proposal. The resulting analysis focused on how LRI II addressed the constraints identified in the gender assessment; whether women and men benefitted equally from LRI II interventions; and the gender gaps, needs, and challenges that need to be addressed in future activities.

LIMITATIONS AND BIASES

The evaluation team was aware of several noteworthy risks to its data collection and analysis:

- **Recall Bias:** Recall bias is a common evaluation problem. A few LRI II beneficiaries responded to questions asked by the evaluation team with answers that blended their experiences into a composite memory. Some representatives who participated in similar activities in LRI I did not distinguish them as separate activities. The evaluation team mitigated this risk by asking about specific activities in LRI II to ensure that those activities were part of the second phase.
- **Response Bias:** Response bias is the risk of key informants being motivated to provide responses that would be considered socially desirable or influential in obtaining donor support. For example, some respondents provided broadly positive remarks about USAID implementation and stated they would like more support from USAID. The evaluation team again mitigated the risk of response bias by asking follow-up questions about specific LRI II activities and specific examples of how they benefited the beneficiary.

FINDINGS AND CONCLUSIONS

QUESTION I

To what extent are the LRI activity and the technical assistance provided under it, relevant to the needs of people in rural communities in terms of building social stability and improving the sustainable management of resources? (see Annex 5 for introduction to question I)

Subquestions:

- To what extent were LRI's goals, purposes, and objectives/results aligned to support the country's national reforestation strategy and the USAID CDCS?

FINDINGS

The primary goal of LRI's web mapping efforts was to create a scientifically developed source to inform and assist active reforestation in Lebanon. Document reviews and KII responses identified the following activities that were aligned with the Lebanon Forest Program's first and second objectives: establishing and updating national data on forest and rangeland sectors and promoting research by establishing partnerships among sectors. LRI launched the first Lebanon forestry online GIS platform, which projects spatial data on environmental and social characteristics onto maps of specific areas of interest to facilitate identification of suitable planting sites, site planning and monitoring, vegetation mapping, wildfire prevention, and climate change impact on species distribution and environmental threats. To develop the platform, LRI collaborated with the Ministry of Agriculture, Save Energy Plant Trees (SEPT), the Shouf Biosphere Reserve, Jouzour Loubnan, the USAID-funded Lebanon Industry Value Chain Development (LIVCD) project, the Committee of the Cedar Forest Friends – Bcharre, and the Lebanese University's Faculty of Agricultural and Veterinary Sciences.

The KII responses and document reviews indicated that LRI's development of improved seedling production protocols and the further support for the CNTPL aligned with the National Forest Plan's 5th objective, *supporting small enterprises through the development of value chain standards for sustainable production of forests and rangeland value added goods*, as well as USAID's CDCS Development Objective 2, *inclusive economic growth enhanced*; IR 2.1, *increased private sector competitiveness*; Sub-IR 2.1.1, *strengthened business association services and policy advocacy*; Sub-IR 2.1.2, *increased business and trade linkages*; and Sub-IR 2.1.3, *increased workforce development linked to job opportunities*. This alignment increased the production of improved high-quality seedlings by 10 nurseries (50,000 to 200,000) and improved coordination on quality control, market access, and marketing through the CNTPL.

The KII responses and document reviews also indicated that LRI activities—creating and operationalizing two SECs, including site selection; selecting partner municipalities; and developing corridor planning committees (CPCs) and offering them capacity building—aligned with the National Forest Plan's 2nd objective, *strengthening the governance of forestland through setting up adapted mechanisms for direct responsiveness, efficient accountability, and active communication*, as well as USAID's CDCS Development Objective 1, *improved capacity of the public sector in providing transparent, quality services across Lebanon*; IR 1.3, *improved governance in addressing citizens' needs in*

public service delivery; Sub-IR 1.3.1, more capable municipalities working inclusively with citizens to effectively accomplish local development objectives; and IR 1.4, strengthened civil society contributing effectively to participatory and democratic governance. Through these activities, LRI has supported the CPCs and partner municipalities in developing 10-year reforestation strategies and 2-year reforestation plans and in planning for joint activities between municipalities, including out-planting and awareness raising.

One of the primary objectives of the LRI project was to support native tree planting on a large scale across all regions of Lebanon by strengthening the tree-planting practices of local reforestation practitioners. LRI's records show that working with local communities, LRI and its Lebanese reforestation partners have planted more than 40 different native tree species, including cedar, fir, juniper, pine, oak, wild pear, wild almond, and many others; but the evaluation team were unable to verify this in the field and only observed 7 species. LRI II, in collaboration with its partner communities and NGO partners, has planted 251,938 high-quality native trees, with an average survival rate of 76 percent, on 441 hectares of Lebanese bare land.

These planting efforts focused on specific social and environmental corridors (SECs), including the North SEC extending from Ehden to Ehmej, the Rachaya SEC extending from Rachaiya North toward Masnaa, and the Chouf Biosphere Reserve SEC. LRI also piloted planting on religious-denominated land as an alternative to public land. The project has employed 927 local community members on a part-time basis for the out-planting and provided irrigation equipment to all municipalities taking part in the out-planting effort. Document reviews and KII and FGD responses indicate that these out-planting activities and results aligned with the National Forest Plan's 3rd objective, *setting up sustainable management in forests and Establishing restoration and rehabilitation plans in degraded lands to counteract soil erosion and desertification*, and 5th objective, *supporting small enterprises through the development of value chains standards, for sustainable production of forests and rangelands value added goods*, as well as with the national 40-million-tree campaign. The out-planting activities also align with USAID's CDCS Development Objective 2, *inclusive economic growth enhanced*, and Sub-IR 2.1.3, *increased workforce development linked to job opportunities*.

Wildfires are a primary cause of deforestation in Lebanon. Working with both governmental and nongovernmental organizations, LRI helped to train local volunteer firefighters to provide a first response to wildfires in less accessible rural areas. LRI also worked closely with local partners to develop effective response strategies that could be implemented nationwide. LRI provided technical expertise to governmental and nongovernmental organizations to improve response coordination in the event of wildfires and provide the needed early response fire equipment.

KII and FGD respondents indicated that the Firewise activities aligned with the National Forest Plan's 2nd objective, *strengthening the governance of forestland through setting up adapted mechanisms for direct responsiveness, efficient accountability and active communication*, and 3rd objective, *setting up sustainable management in forests*. The activities aligned with USAID/Lebanon's CDCS Development Objective 1, *improved capacity of the public sector in providing transparent, quality services across Lebanon*; IR 1.3, *improved governance in addressing citizens' needs in public service delivery*; and Sub-IR 1.3.1, *more capable municipalities working inclusively with citizens to effectively accomplish local development objectives*.

LRI has supported six municipalities by introducing participatory approaches to wildfire prevention and response, coaching NGOs and municipalities on developing and validating Firewise action plans, supporting NGOs through ongoing mentoring to implement Firewise activities, and raising awareness about wildfires.

Document reviews and KII and FGD responses indicate that the climate change activity aligned with the National Forest Plan's 3rd objective, *establishing restoration and rehabilitation plans in degraded lands to counteract soil erosion and desertification*, and 4th objective, *enhancing ecosystem resilience in forestland to mitigate the impact of climate change and other natural hazards*. The activities also aligned with USAID/Lebanon's CDCS Development Objective 1, *improved capacity of the public sector in providing transparent, quality services across Lebanon*; IR 1.3, *improved governance in addressing citizens' needs in public service delivery*; and Sub-IR 1.3.1, *more capable municipalities working inclusively with citizens to effectively accomplish local development objectives*.

LRI worked with selected municipalities to strengthen their response to climate change by creating a strategic and coordinated approach that involved communities and experts in assessing the magnitude of current and future risks, such as soil erosion and landslides triggered by climate change and quarry damage. LRI's experts carried out biodiversity assessment sessions in the presence of local stakeholders. These sessions included familiarizing the stakeholders with the site's biodiversity (fauna and flora) and ecology and teaching them how to collect data. Concept development sessions were also conducted with local stakeholders. These sessions included rehabilitation designs that were later developed with the involvement of the local communities.

LRI involved private companies in reforestation efforts through their respective CSR programs. Essentially, LRI solicited donations from several companies and carried out reforestation efforts in collaboration with company employees both to raise awareness and to create a sense of company ownership of reforestation practices. In total, private companies donated \$169,000 for reforestation. This activity aligned with USAID/Lebanon's CDCS Development Objective 2, *inclusive economic growth enhanced*; IR 2.1, *increased private sector competitiveness*; Sub-IR 2.1.1, *strengthened business association services and policy advocacy*; and Sub-IR 2.1.2, *increased business and trade linkages*.

CONCLUSIONS

All project activities, objectives, and results aligned with the National Reforestation Plan and the National Reforestation Initiative (the 40-million-tree campaign).

All project activities, objectives, and results aligned with USAID/Lebanon's CDCS Development Objective 1, IR 1.3, Sub-IR 1.3.1, IR 1.4, Sub-IR 1.4.1; and Development Objective 2, IR 2.1, Sub-IR 2.1.1, Sub-IR 2.1.2, and Sub-IR 2.1.3.

- To what extent did LRI conduct activities in line with their approved work plan? (de jure vs de facto)? (Were they able to do what they set out to do?)

FINDINGS

LRI achieved and, in some cases, surpassed, all the indicators used to measure progress in project activities in the MEL plan, which is aligned with the three annual project workplans.

Table I- Goal

Goal/ Purpose	Indicator	Target	Result
To build social stability and promote sectarian harmony in host communities, through sustainable participatory reforestation capacity building, and protection from environmental threats	Social stability improved in target USG-assisted communities	71.26	73.86
	Number of entities with enhanced capacity as a result of USG support	75	91
	Number of person hours of training in natural resource management and/or biodiversity conservation supported by USG assistance	4,222.5	4,950
	Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance	443	441.26
	Number of USG-supported activities designed to promote or strengthen the civic participation of women	21	17
	Greenhouse gas (GHG) emissions, estimated in metric tons of CO ₂ e reduced, sequestered, and/or avoided through sustainable landscape activities as a result of USG assistance	187,146	333,141.88

Table 2 – Purpose I

LRI Purpose I: Diverse communities brought together and supported to provide stewardship over their shared social and environmental corridors, support twinning neighboring communities within those corridors, and engage Syrian refugees in addressing common environmental issues.

Goal/ Purpose	Indicator	Target	Result
LRI Purpose I: Diverse communities brought together and supported to provide stewardship over their shared social and environmental corridors, support twinning neighboring communities within those corridors, and engage Syrian refugees in addressing common environmental issues	Number of consensus building forums (multi-party, civil/security sector, and/or civil /political) held with USG assistance	10	10

LRI Subpurpose 1.1: Communities empowered to manage their SECs and leverage funding to fill the gaps	Number of USG-supported activities implemented from the CPCs' 10-year action plans	6	19
	Number of municipalities that are implementing citizen-identified projects as a result of USG assistance	48	32
LRI Subpurpose 1.2: Previous LRI-selected and mentored communities twinned with other surrounding communities on the two selected SECs	Number of USG-supported activities implemented from the twinned communities' five-year action plans	33	16
LRI Subpurpose 1.3: Social stability supported between Lebanese and Syrian refugee communities	Number of groups trained in conflict mediation/resolution skills or consensus-building techniques with USG assistance	16	15

LRI Subpurpose 1.2 - Twinning of communities took place only in the first year of LRI II. Therefore, LRI did not implement this activity in line with their workplan.

Table 3 – Purpose 2

LRI Purpose 2: Watershed protection, rural economic development, and livelihood gains for sustainable communities supported through enhanced and expanded reforestation.

Goal/ Purpose	Indicator	Target	Result
LRI Purpose 2: Watershed protection, rural economic development, and livelihood gains for sustainable communities supported through enhanced and expanded reforestation	Number of beneficiaries who have applied new technologies or management practices as a result of USG assistance	Individuals: 509 Entities:44	Individuals:927 Entities:38
	Number of people with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance	490	927
	Percentage of "advanced" tree seedlings surviving after one growing season in targeted planting areas	80	64.6
LRI Subpurpose 2.1: Expanded and protected tree planted areas to landscape-level bio corridors	Total "advanced" native forest tree seedlings planted on public land	197,800	251,938
LRI Subpurpose 2.2: Increased private sector	Number of reforestation projects funded by the private sector	16	19

engagement in reforestation efforts			
LRI Subpurpose 2.3: Incentives introduced for the planting of native trees of economic importance on religious-denominated lands	Total “advanced” seedlings of economic species planted on religious-denominated lands	30,000	15,001
LRI Subpurpose 2.4: Participatory reforestation practices improved and disseminated on a larger scale	Number of capacity-building activities on reforestation practices implemented with USG assistance	42	82
LRI Subpurpose 2.5: CNTPL effectively contributing to national reforestation activities and playing a leading role in reforestation across the country	Number of local partnerships built by CNTPL with USG support	12	14
LRI Subpurpose 2.6: National awareness of reforestation raised	Number of national awareness campaigns on reforestation conducted with USG support	5	6
LRI Subpurpose 2.7: LRI web-mapping platform developed	Number of materials published on the ArcGIS Online mapping platform with USG support	118	145

The LRI project achieved all its target indicators for Purpose 2 of the project, except for the following:

LRI Subpurpose 2.3 - LRI planted 15,001 (versus a target of 30,000) “advanced” seedlings of economic species on religious-denominated lands.

Table 4 – Purpose 3

LRI Purpose 3: Communities empowered to anticipate and protect themselves from economic and environmental threats posed by wildfires, quarries, and climate change impacts.

Goal/ Purpose	Indicator	Target	Result
LRI Purpose 3: Communities empowered to anticipate and protect themselves from economic and environmental threats posed by wildfires, quarries, and climate change impacts	Number of USAID-assisted local civil society organizations engaged in community, regional, and national programs	15	17
LRI Subpurpose 3.1: Capacities built on fire prevention in high fire risk communities	Number of activities implemented from the Firewise action plan	38	39
LRI Subpurpose 3.2: Local communities supported in reversing	Number of quarry restoration plans developed with USG support	3	3

the negative effects of human activities, and more specifically quarrying, on their local environment and social perception of those lands	Proportion of quarry restoration activities implemented per restoration plan with USG support	50	33
LRI Subpurpose 3.3: Strengthened response of underserved rural communities to climate change and other hazards	Number of climate change adaptation plans developed with USG support	2	2
	Number of activities implemented from the climate change adaptation action plans with USG support	5	4

LRI Subpurpose 3.1 - LRI worked with several communities to introduce the Firewise program and to develop fire prevention and reaction plans. However, Lebanese legal frameworks proved to be a barrier to practical implementation of the program.

LRI Subpurpose 3.2 - LRI identified three communities where the project would pilot quarry rehabilitation. They worked together with academics and communities to develop detailed plans that would be used to rehabilitate the quarries. However, they could start implementation in only one of the quarries and to a very limited extent.

LRI Subpurpose 3.3 - LRI worked with several communities to develop action plans to address the hazards posed by climate change but could implement activities on only one of the sites. Here they built terraces to prevent landslides with funding obtained through the United Nations Development Programme (UNDP).

CONCLUSIONS

LRI met all its indicator targets, except for the following:

LRI did not implement the stated indicator targets for Subpurpose 1.2 because twinning activities were suspended to enable the project to expand its area of influence.

LRI did not reach the stated targets for Subpurpose 2.3. LRI did introduce incentives to plant native seedlings of economic importance on religious-denominated lands. They did not however, meet their target of 30,000 seedlings, although the project staff indicated that this target would largely be met during the closing stages of the project.

LRI could not meet the targets set for Subpurpose 3. Although LRI has created a framework for addressing fire risk in communities and has worked to raise communities' capacity to address these risks, their inability to put the Firewise plans into practice indicates that communities facing a high risk of fire are not likely to have a higher capacity to deal with it.

LRI did not meet the target activities set in the workplan for Subpurpose 3.3 but has indicated that it intended to complete these activities in the last quarter of the project..

- To what extent did the activity’s technical assistance answer and/or address the real needs within the activity intervention areas?

FINDINGS

National

Stakeholders identified the following activities as addressing real (or priority) needs:

- The project developed and implemented technically advanced nursery protocols to increase production and improve native tree seedling quality.
- The project built the capacity of 10 nurseries and created the CNTPL to coordinate and market nursery products.
- The project developed advanced, scientifically based GIS maps to identify ideal sites for reforestation. This web mapping platform was also developed to facilitate continuous data inputs from multiple partners.
- The project developed civil society–driven reforestation initiatives at the community level. These initiatives included local capacity building to both implement reforestation initiatives and raise funds to continue with the initiatives.
- The project planted 641,000 trees across several landscapes in Lebanon since phase I.
- The project developed web-based mapping tools and fire prevention protocols for fire prevention in Lebanon.
- The project developed scientifically based protocols for quarry restoration.
- The project developed scientifically based protocols to address community shocks to climate change—specifically, protocols to prevent landslide threats.
- The project developed and implemented nationwide awareness campaigns on reforestation.
- The project worked with the private sector to raise funds and implement planting activities.

Nurseries

The KIIs noted that prior to the project, native tree nurseries in Lebanon could produce only 50,000 seedlings annually. These seedlings were of poor quality with a 25 percent survival rate. LRI developed new nursery production protocols that built the nurseries’ capacity to produce 200,000 seedlings annually and raise the seedling survival rate to 75 percent. They also created the CNTPL, which developed nurseries’ organizational and marketing capability.

Out-planting

The KIIs indicated that planting on forest land in Lebanon, prior to the project, was limited to forest reserves. Planting techniques were primitive and had a low survival rate. LRI introduced scientifically based planting techniques, improved communities’ out-planting capacity, and raised survival rates from 25 percent to 70 percent. They also worked with communities and religious groups across Lebanon to identify and expand planting areas to public and religious-denominated lands.

Firewise

KII and FGD responses and document reviews indicate that forest fire is the greatest modern threat to forests in Lebanon. LRI developed a three-step fire prevention and response program to help counter that threat. The evaluation team however, discovered on the fact-finding mission that firefighting protocols had already been developed in Lebanon, and a five-pillar fire prevention plan had been approved by the government in 2012. The key informants also pointed out that the Firewise program was not consistent with the five pillars of the national program. Another issue is that Firewise protocols were designed around commercial plantation management and not around natural forest management.

Quarries

LRI worked with numerous partners to develop a scientifically based approach to quarry restoration. They worked with international experts and scientists from academic institutions in Lebanon to develop criteria for site selection. These scientists carried out scientific studies on, among others, geology, hydrology, biodiversity, and so forth. LRI worked with representatives of municipalities to develop restoration plans for three selected quarries and have begun implementation (reforesting crowns) in one of the quarries.

Climate change

LRI worked with academia and municipalities to identify areas that have been and could be affected by climate change—specifically, from landslides. They developed restoration plans with six municipalities and have already implemented activities on one site. The need to address this issue is well documented and well understood by academia and civil society alike.

SECs and communities

Most respondents described the LRI activities as responding to community needs, but in fact these people are direct project beneficiaries, consisting mostly of activists in the communities, and therefore do not represent the wider community. All municipal respondents said that reforestation was not a priority, unlike economic growth and access to water, which they described as top priorities. They also indicated that they would not be in the position to fund the maintenance of areas that had been planted, much less expand the planting area.

CONCLUSIONS

National

LRI has responded to the Lebanon National Forest Plan (2015–2025) and the National Reforestation Initiative.

Nurseries

The LRI project clearly addressed the needs of native species nurseries in Lebanon by responding to seedling production and quality needs as well as organizational and marketing needs.

Out-planting

LRI responded to the out-planting needs identified through scientific research, such as the need to improve planting protocols to increase seedling survivability and the need to identify larger areas for out-planting to meet the requirements of the National Reforestation Initiative.

Firewise

LRI's response to fire prevention in Lebanon addressed the need to improve fire prevention and responsiveness, but it did not do so directly through existing mechanisms, and a lot of resources

were used to “reinvent the wheel.” The Firewise approaches did not respond to the real need of forest fire prevention in natural forests in Lebanon as the protocols introduced were designed to address fire threats in production forests.

Quarries

Given the big problem of quarrying and the environmental destruction it causes in Lebanon, LRI has responded to a need identified by both civil society and the government.

Climate change

LRI responded to the need to address climate-related shocks in economically depressed areas. These needs were identified through academic papers and civil society.

SECs and communities

LRI did not respond to the direct needs of communities, but rather introduced a perceived need driven by civil society.

QUESTION 2

How and to what extent has the activity achieved planned results in terms of: reversing environmental degradation by reforesting grasslands, shrub-lands, and areas burned by wildfires; engaging the community to protect its environment; and engaging the private sector through native tree nurseries and support for out-planting??

Subquestions:

- What are LRI’s headline outcomes and achievements? How have these been documented and analyzed?

FINDINGS

LRI achieved several important outcomes in the components initiated in LRI I and reinforced in LRI II. Among these headline achievements were the following:

- The Cooperative of Native Tree Producers in Lebanon (CNTPL), created in LRI I, was strengthened during LRI II. LRI worked with the CNTPL to build capacity in organizational management and marketing. They also developed the CNTPL’s capacity in proposal writing and helped the organization to network with multiple donors. The CNTPL is currently the main contributor to national reforestation activities through the provision of high-quality native tree seedlings. Through a central coordination mechanism, the CNTPL has a clear vision, mission, and organizational structure. The advanced seedling production methods and techniques, the coordination between the CNTPL nurseries and all reforestation stakeholders from the private and public sector, and the close follow-up by LRI staff and experts ensure the maintenance of high-quality seedlings with an improved survival rate (70 percent for CNTPL nurseries compared with 25 percent for Ministry of Agriculture nurseries). The CNTPL has positioned itself as the most significant provider of native tree seedlings for reforestation projects and initiatives in Lebanon. Its president and manager are fully aware of the need to develop and diversify their market, and as a result, a new marketing and communication plan is being developed to respond to medium- and long-term challenges.

- Following the success of the nurseries component in LRI I, LRI II launched the National Guidelines for Native Nursery Management: Trees & Shrubs, which was developed in partnership with AUB's Nature Conservation Center and in collaboration with the Ministry of Agriculture. This national recognition of the nurseries production guidelines will further reinforce the position of CNTPL nurseries at the national level.
- According to the KIIs with the MOA and FAO, the out-planting component in LRI II constituted the largest contributor to national reforestation activities in terms of the number of seedlings planted (251,938) and the surface area covered (441 Ha).
- LRI II initiated cooperation and networking among all reforestation stakeholders. This cooperation resulted in effective knowledge dissemination, experience sharing, and coordination for better planning and management of reforestation efforts. The scientific planting methods and techniques used by LRI were documented and made available for all relevant stakeholders from the public and private sectors.
- LRI II promoted the use of specialized GIS and mapping tools for reforestation, forest management, and ecological restoration activities, involving all relevant stakeholders. KIIs with NGOs, the MOA, and academia all indicated that they had found the tools useful in planning reforestation and fire prevention activities. NGOs also indicated that they had found the tools useful in providing information to donors for funding purposes. The comprehensive ArcGIS Online platform created by LRI is a national reference for all reforestation and forest management practitioners and experts who can access it to use and share maps and data on suitable planting sites, site planning and monitoring, vegetation mapping, wildfire prevention, and climate change impact on species distribution and environmental threats, by projecting spatial data about environmental and social characteristics onto maps of specific areas of interest.
- The creation of the LRI-NGO was a major step toward improving the prospect of sustainability of all the activities implemented during LRI I and LRI II. The LRI-NGO is witnessing rapid growth and development and has been able to build a respectable reputation among stakeholders and donors in Lebanon and the region. It has become the reference for reforestation and forest management in Lebanon. The LRI-NGO capitalized on a capacity-building program for fundraising under the BALADI CAP project funded by USAID and secured funding from multiple international donors in a short time frame, as well as from the private sector.

CONCLUSIONS

The project introduced a credible scientific and technical approach to reforestation in Lebanon, which had, and will continue to have, a positive impact. These improvements concern the quality and survival rate of native tree seedlings, the management of planted sites, and the application of GIS and mapping technologies for the management of natural resources and forests.

The knowledge and expertise developed and introduced through the project have been adopted and applied by public and private sector stakeholders at the local, regional, and national levels. The collaborative approach adopted by LRI and the creation of the LRI-NGO are among the project's signature achievements.

- To what extent has the activity achieved its outcomes and stated purposes?

FINDINGS

The evaluation team's findings from the analysis of question 2 b) were confirmed by the partners, who reported a very high level of satisfaction with LRI's activities in achieving the project's outcomes and stated purposes. Municipalities, for instance, were highly appreciative of the support they received from LRI, with all key informants, including mayors and council members, reporting that all the terms and outcomes originally agreed to with LRI were honored with the best quality assured. This, as observed, created a relationship of trust and real partnership between key stakeholders in the field on one hand and the LRI team on the other, hence better positioning the project for successful outcomes.

The following is a detailed analysis of FGD and KII responses:

- Corridor planning committees have been created in two SECs in the North and Rachaya. The approach was shelved in the Shouf Reserve, but LRI worked with the existing Shouf Biosphere Reserve's management board to implement its activities. The CPCs are composed of two representatives from each village participating in the corridors: one of them represents the municipality, and the other is usually a subject matter expert or environmental activist. In general, the CPCs exhibited a high level of synergy and cohesion in the FGDs. They also pointed out numerous skills and capacities developed through the training and continued support they received from the LRI team and consultants. Some of the improved capacities highlighted include strategic planning, environmental conservation awareness, proposal writing, and fundraising. More information about the CPCs' prospects and hindrances to sustainability will be discussed in more detail in section Q.4.
- According to FGD and KII responses, the CPCs have created a platform for environmental activists, nature advocates, and environmentally aware municipal members from neighboring villages to come together. Some of these villages have a long history of conflicts or tensions with each other, such as Bcharre and Ehden or Yammouneh and Deir el Ahmar. In Rachayya, for instance, the CPC is composed of villages that are part of two unions of municipalities, which seem to have an unsettled history of competition and tense relations. As a result, the CPC members are quite proud of their internal relationships and how the common cause of planning and creating the SEC has enabled them to work together. More information about the CPCs' social stability role and their successes and challenges will be explained in section Q.2 (e).



Figure 1. FGD with Rachaya's CPC at the Union of Municipalities of Qalaat Al Istiqal

- After several LRI-led training sessions on conflict resolution and communications, a Lebanese-Syrian youth group was formed in Rachaya in parallel with the development and training of the CPC. Within the group, the interaction between Lebanese host communities and Syrian refugees was significantly enhanced, in accordance with the evaluation team's observation during the FGD with the group and the participation in National Reforestation Day in Qaroun. Albeit being LRI-driven and -led during its early stages, the group acknowledges the added value of working together whereby *"some people didn't want to mix [when the training started] but a lot of issues and misconceptions were dealt with. The Syrians indicated that they perceived that the Lebanese did not want to interact with them or that they looked down on them while the Lebanese also had negative perceptions about the Syrians. We talked about a lot of these misconceptions and issues and we still do share a lot of problems and talk about them."*



Figure 2. Lebanese and Syrian youth volunteers participating in National Reforestation Day in Qaroun

Other than the aforementioned youth group, there was no significant Lebanese-Syrian interaction apart from out-planting activities where workers from both nationalities were hired as laborers on a site, with interaction limited to the tasks being performed.

- The 10 nurseries in the CNTPL have increased their capacity to produce a higher number of high-quality seedlings (from 50,000 seedlings annually to 200,000), which will have a direct positive impact on their income. This was confirmed through the field visits to the two nurseries in Bcharre and Jezzine.
- Most donors and key officials that the evaluation team met during the KIIs agreed that LRI had become the go-to reference for guidance and protocols on seedling production or out-planting techniques and best practices.



Figure 3. CNTPL's president (R) explains the enhanced techniques of native tree nursing to the evaluation team leader (L)

- Even though the evaluation team witnessed a variation between the eight planting sites visited during the evaluation period, mainly due to different levels of follow-up by municipalities, field observations have confirmed the LRI reports that planted seedling survival has improved (25 percent to 70 percent).
- Plans for the restoration of quarries have been developed, but implementation had only just begun when the evaluation was underway.



Figure 4. Field visit to a recent out-planting site in the North corridor



Figure 5. Daily workers installing a fence on a former quarry site to protect recently planted trees

- Despite attempts to increase private sector contributions to reforestation efforts, it was reported that the Lebanese private sector's contributions remained the same as in LRI I. This should not be construed as a negative sign considering the economic situation in the country at large, especially when comparing the resources used in LRI I with those used in LRI II to raise an equivalent amount of money.

On the other hand, however, there was no evidence that the diaspora were engaged at all in these efforts. This topic was not mentioned in any of the KIIs or FGDs and it seems to have been dropped from LRI's strategy/approach even though it was one of the focus areas of the workplan and design.

- Most key informants who were interviewed indicated that they were satisfied with the Firewise requirements even though the related activities were restricted to planning and cleaning along roadsides due to restrictions posed by legal frameworks. These restrictions hindered their ability to clear firebreaks, prune low-growing branches, and clear away deadwood and understory debris. The informants indicated that legal frameworks will continue to hinder the fire prevention efforts if the laws that govern the sector are not amended to incorporate or accommodate such interventions.

In some KIIs, questions were raised about the adoption of the Firewise model created by LRI and USFS, knowing that there was already a national fire prevention plan/strategy that had been adopted and approved at the national level. It was not clear to the evaluation team, from the interviews with the LRI staff and Firewise trainees, what the activity's added value was in comparison with the national fire prevention plan. The only difference was in the number of steps in the Firewise protocol (three for Firewise and five for the national plan); the pillars of both processes were the same.

- Awareness events were implemented at the national, regional, and local levels, reaching large audiences. For instance, on November 4, 2018, LRI, in coordination with the Litani River Authority, organized a National Reforestation Day, which gathered around 2,000 participants from most regions and confessional groups in the country. The event provided a good opportunity to promote reforestation and the environment as a common cause for all participants, most of whom were youth.



Figure 6. A young participant at National Reforestation Day



Figure 7. During the welcoming speech of National Reforestation Day at Qaroun

- LRI created both short- and long-term work opportunities for Lebanese and Syrian workers in what most KIIs and FGDs described as a low period for daily workers. Because the out-planting time usually starts in November after the different harvesting seasons end, it comes in a “dead period” for the short-term workers, who reported that this income “comes at the right time” for them to cover the basic needs of their families as well as part of their winter expenses, such as heating, clothing, and education.
- The web-mapping tool developed by LRI was highly acknowledged and appreciated by reforestation experts and other partners working on reforestation in Lebanon. It lays a foundation for better resource sharing and collaboration among actors, including the ministry. This contribution was one of the reasons LRI was described as the go-to resource for reforestation. Therefore, keeping this in-house capacity will allow LRI to maintain its leading position in the field.

CONCLUSIONS

LRI succeeded in creating the CPCs as platforms to bring together diverse community members—mainly activists and municipal representatives—to work side by side for the common goal of environmental protection, but this collaboration did not necessarily “trickle down” to the greater community. The evaluation team believes that these enhanced relationships took place primarily among the CPC members and probably within their closest circles. But there is no reason to believe that the community was engaged with more than a few sporadic activities that did not include much interaction among participants.

Also, short-term rural economic development and livelihood gains have been achieved to an extent and appreciated by those who benefited from them during what they considered a “dead or low season.” These respondents were both Lebanese and Syrian agricultural workers who usually end

their harvesting seasons around the beginning of the reforestation and out-planting season in November. Other economic development gains include the enhanced productivity of both the nurseries under the CNTPL and the women's cooperative in Mhaidse, which increased their production through LRI support. Long-term economic development gains perceived by interviewees were related to ecotourism, but these gains would not manifest for another 10 to 15 years or even longer in certain cases, when these forests grow and become appealing for hikers and tourists to visit. This outcome will have to be coupled with a raised capacity of local tour guides and environmentally friendly practices of local authorities and communities.

In general, the groups and individuals that LRI engaged with throughout its activity have a demonstrated enhancement in their capacity—relevant to the training they received—along with an elevated sense of environmental awareness and ownership. All this was highlighted in the various KIs and FGDs conducted. Communities are more aware and engaged in thinking and planning approaches that would protect them economically and environmentally from threats of wildfires or climate change. They will need more time to explore and experience various techniques and approaches to master them and, through local authorities' engagement, make sure to get the needed law enforcement support to sustain them. But the main problem facing their ability to anticipate and protect themselves arises from the restrictions posed by the legal framework.

LRI achieved most outcomes under the three stated purposes, with a clear strength in technical environmental aspects, including enhanced seedling survivability, out-planting, awareness raising and training, and geo-mapping. Albeit to a lesser degree, the project achieved the other outcomes related to social stability, climate change preparedness, and community engagement and empowerment to lead on fire prevention.

- What are the main factors that positively or negatively influenced LRI's ability to achieve these purposes?

FINDINGS

Positive factors include the following:

- The first phase of the LRI project created extensive science-based protocols and baseline data for project activities. For example, they worked with experts to develop GIS-based maps of areas conducive for reforestation, in addition to forest fire risk maps and maps of Lebanon's forests. These baseline data allowed them to implement project activities that had a direct influence on the baselines.
- The LRI staff were extremely professional in their approach to project activities, and all of them had a high level of knowledge in the areas they were implementing. Staff were also highly dedicated, and continuous, intensive follow-up on project activities proved to be extremely effective in producing high-quality products and building capacity at the community level and in nurseries.
- LRI gathered, collaborated with, and capitalized on working with many donors, Lebanese NGOs, and academia to achieve the project's purposes and outcomes.
- The geography and small distance between villages in the Rachaya corridor proved to have a positive effect on project outcomes, especially on cooperation within the CPC.

Negative factors include the following:

- Social and political instability created obstacles in some of the project's components. For example, in the North corridor, municipality representatives were not open to working with Syrian refugee communities on decision making, complicating implementation of the social stability aspect between Syrian and Lebanese communities. Changes in municipal leadership, who often need to create their own areas of influence in communities, created obstacles to long-term planning needed for reforestation.
- The project faced several legal and institutional obstacles in project implementation, particularly in the Firewise component implementation, where permission for project activities was required at the national level. For instance, it is illegal to prune the lower branches of trees and clear undergrowth material in protected forests, so it was impossible to implement this part of the Firewise component.
- The KIIs and FGDs indicated that geographical barriers and the distance between villages in the North corridor was an issue (villages on either side of the mountain could not reach each other in the winter and the distances between them made it expensive and difficult to travel, especially with the lack of public transport).
- The key informants said that they found it difficult to work through several issues with the MOA, especially addressing barriers in forest law pertaining to forest fire management and setting up a National Forest Fund.
- The key informants indicated that the private sector thought the economic crisis in Lebanon restricted their ability to direct or spare resources for reforestation.

CONCLUSIONS

KII and FGD responses indicate that internal factors, such as scientifically based approaches and LRI's expertise and commitment, contributed positively to the project's ability to achieve its purposes. Negative factors were, however, more contextual, including barriers created by legal frameworks, social instability, and long-standing resentments between communities.

- **What impact did LRI have on the reforestation sector—specifically, through reversing environmental degradation by reforesting grasslands, shrublands, and areas burned by wildfires?**

FINDINGS

Complexities posed by land tenure and property rights in Lebanon limit the impact the project can have on reversing environmental degradation. All reforestation activities that the project implemented were done on publicly owned bare land and land owned by religious institutions. This area accounts for only a small portion of the bare land in Lebanon, and the greatest environmental degradation problems currently occur on privately owned land. Legal frameworks discourage private landowners from reforesting their land because once land has been forested, landowners cannot cut the trees down and use the land for any other purpose, rendering it useless in economic value.

The corridor design was done on a scientific basis, taking into consideration factors related to the geographical continuity and potential expansion of the existing forests. It focuses on expanding forest cover using native tree species without having a comprehensive approach for forest landscape connectivity and ecosystem management and protection, except in the Shouf area, where the Shouf Biosphere Reserve is implementing a parallel ecosystem conservation plan.

CONCLUSIONS

Reversing environmental degradation through reforestation is a complex and lengthy process, especially when whole forest ecosystem services and functions are considered. The improved management of the three corridors from both an ecological and socioeconomic perspective will contribute to better forest ecosystem management and protection. This improvement is more likely to happen in the Shouf due to the existence of a legal entity responsible for managing the Shouf Biosphere Reserve. The contribution of the Rachaya and North Lebanon corridors to sustainable ecosystem management will depend on the level of involvement of the local and regional stakeholders represented in the ECs and CPCs. Tangible results in this field, such as increased landscape connectivity and enhanced biodiversity of flora and fauna, will be observed beyond the lifetime of the project and need to be monitored and measured continuously. The project did not have any impact on reversing environmental degradation in areas burned by wildfire due to the inactivity on such lands.

- By engaging the community to protect its environment?

FINDINGS

Community engagement activities implemented during LRI II targeted three levels of the Lebanese community: 1) village communities through the ECs and municipalities, 2) regional and clustered communities through the CPCs, and 3) the general public through national campaigns.

The engagement at each of these levels was limited to participation in reforestation activities, training sessions, and environmental awareness campaigns. The activities were not integrated in a clear and strategic community mobilization plan with specific objectives associated with each target group. The activities were not developed around a baseline where achievements could be measured in terms of community participation and engagement toward better natural resource management and protection.

The degree of community engagement varied among the three targeted areas, depending on the existence of grassroots civil society organizations (in Shouf and Bcharreh, for example) and on the motivation level of key community members who act as mobilizers.

Key informants indicated that awareness of environmental issues was absent at the wider village community level and limited to direct project participants. Most municipal mayors and members stated that they did not have the financial resources to continue reforestation activities and that the municipalities had other priorities, with economic development at the top of the list.

CONCLUSIONS

A successful community engagement approach should be initiated through community mobilization to involve as many community members as possible (individuals, civil society organizations, private sector, municipalities) in environmental management and protection and at different levels, from decision making to implementation and follow-up.

Creating economic incentive schemes for community members (individuals or groups) will increase their engagement and willingness to get involved in the protection of natural resources and forests. Several communities in Lebanon have a strong will and a high level of awareness about environmental issues. However, funding and legal frameworks remain the main obstacles to their capacity to participate proactively in natural resource management and protection.

- By engaging the private sector through native tree nurseries and support for out-planting?
 - Private sector support for out-planting

FINDINGS

LRI put considerable effort into engaging private sector companies in its activities, with a focus on reforestation. LRI II invested \$172,756 for private sector engagement (including the administrative cost of project overheads). The economic crisis faced during LRI II affected the private sector's support for LRI's out-planting activities, with only \$169,142 leveraged, which resulted in a low cost-effectiveness ratio for this component:

$$\frac{\text{Private sector leverage investment } 169,142 \$}{\text{LRI investment to engage private sector } 172,756 \$} = 0.98$$

CONCLUSIONS

LRI's engagement with the private sector was not cost effective and depended highly on the country's economic situation and stability.

- LRI-NGO engagement in native tree nurseries

FINDINGS

LRI II supported the private sector native tree nurseries and their cooperative with a total budget of \$380,888 (including the administrative cost of project overheads). The continuous follow-up with the nurseries and the CNTPL improved the seedling production volume from around 50,000 seedlings per year for all nurseries to 200,000 seedlings. The advanced production techniques introduced in LRI I and adopted in LRI II by all CNTPL nurseries resulted in the production of high-quality seedlings with the use of little medium and easier transportation and handling from nurseries to the field.

During LRI II (2015–2018), around 450,000 seedlings were additionally produced by the CNTPL nurseries and sold to LRI and other organizations at an average price of \$1.67 per seedling, accounting for a total economic benefit of \$751,500.

CONCLUSIONS

The strong partnership between LRI-NGO and CNTPL nurseries is a key success for LRI as well as future reforestation projects. The knowledge and expertise acquired by the nurseries and the advanced seedling production techniques adopted will enable them to increase their effectiveness.

- Advanced planting techniques, resulting cost/benefit, and out-planted seedling survival on reforestation

FINDINGS

KII and FGD responses clearly indicated that the advanced planting techniques were LRI's greatest achievement, especially with their adoption by public and private stakeholders involved in reforestation activities at the national level. The responses indicated that improved seedling quality and the adoption of reforestation techniques based on solid scientific research and adaptation measures for each selected site with relation to fencing and irrigation resulted in two main achievements: increased survival rate of planted seedlings from 25 percent to 70 percent and reduced cost of planted seedlings from \$18 to \$7 on average. Despite these positive results achieved during LRI I and reinforced during LRI II, the cost-effectiveness of advanced planting techniques during the project's overall duration was moderate. Cost savings relative to the amount invested:

$$\frac{\text{Number of seedlings planted (251,938) X Reduced cost per seedling planted (11\$)}}{\text{Amount of money invested by LRI on outplanting 2,719,246 \$}} = 1.02$$

CONCLUSIONS

The nationwide adoption of LRI's new methods and techniques by public and private entities will ensure the technical success and financial effectiveness of future reforestation projects. A solid scientific foundation for reforestation activities strengthened the capacity of public and private sector entities, which can now execute reforestation projects in a more professional and effective way.

- What evidence is there that social stability has improved as a result of reforestation projects in identified communities?

FINDINGS

During several KIIs and FGDs, participants highlighted social stability or, more precisely, enhanced communal relationships among active members of the CPCs or ECs as one of the main outcomes of the LRI project. Personal stories were shared that included examples of individuals who had never visited neighboring villages because of different confessional or political backgrounds and individuals who had very limited interaction with others from different sects or nationalities (e.g., Lebanese/Syrian). Most of these stories were told by younger individuals living in rural communities that lack public transportation and year-long activities. Most stated that they had never found any reason to visit neighboring villages, and even if they did, the lack of public transport made it difficult

to do so. In other cases, prejudices and historic long-standing conflicts over land demarcation, water or land ownership, and other political or sectarian divisions hindered interaction between communities, such as Yammouneh and Akoura or Deir el Ahmar and Bcharre and Ehden. Some KIIs also mentioned that it was hard for their relatives or friends living in the same village to interact with people from neighboring villages that they had been raised to fear or even hate. Interviewees suggested that enhanced relationships were a byproduct of the project's main themes: reforestation and enhancing green coverage. They indicated that they had joined the activities because of the latter but were happy to have accomplished both. The evaluation team found no urgency or desire among participants to replicate the social cohesion accomplished within their committee, be it a CPC or EC, at a wider community level. As a result, the evaluation observed no major impact on social stability for the wider community.

The social stability component had several changes in staff and leadership within the LRI team. And even though the initial plan of creating the CPCs continued throughout LRI II, the approaches and focus on social stability versus the technical reforestation component were affected negatively by the lack of social stability expertise among the team. This shortcoming was reported by the former social stability expert who mentioned how hard it was to even convince the LRI team of the importance of social stability in their work versus the technical focus they had been used to in Phase I.

The choice of CPC locations was also made based on technical and environmental considerations, complicating efforts to retroactively develop stabilization interventions.

The tool used to design this component and measure its impact seemed to give very little insight into true needs or progress. The social stability assessment used by the LRI team quantifies three main elements: the quality and frequency of intercommunity interactions, the existence of a conflict management mechanism, and the presence of connectors between groups. The tool then compares baseline numbers to endline numbers after the implementation of the reforestation and awareness-raising activities. An example of this tool's inadequacy is that it is unable to take into account certain incidents like the one reported by one of the north CPC key informants, who said that one of the reasons he was no longer following up with the rest of the committee was that when he *"suggested that they do an activity that would engage Syrian refugees and get them to be part of the planning process, the rest of the CPC members rejected the proposal and refused to even be with Syrians on the same table. For them, Syrians can only be workers in the field."* This animosity or intolerance toward Syrian refugees and exclusion from discussions, planning, or activity design are not reflected in the assessment's results. On the other hand, the positive relationship between Syrian refugees and the Lebanese hosting community in Mdoukha due to long-term relationships and intermarriages is also hard to depict in a quantitative tool. These positive relationships can be construed as activity-driven, whereas an in-depth conflict analysis would have given a better picture of how the three components interacted in targeted communities.

CONCLUSIONS

Improving social stability is a complex process in Lebanon and cannot be achieved through one sector, especially where reforestation efforts are led by civil society and not by the wider community. Therefore, the project's social stability component had an impact only on individuals within the CPCs and ECs. Engaging Syrians in decision making, planning, or strategizing remains a very sensitive and unacceptable topic in many municipalities.

Reforestation was conceived by the local communities as a common cause that united them, at least temporarily or on a limited scale. Such unity can be seen in national, regional, and local activities that mobilize individuals and groups from different backgrounds. But these activities mostly do not allow for frequent, high-quality interaction among participants, limiting the effectiveness of the approach.

- Which aspects of the program were relatively more, or relatively less cost-effective toward achieving the activity's goal?

FINDINGS

LRI II's most cost-effective components were:

- The organizational and technical improvement of nurseries and the creation of the CNTPL, as they no longer need outside investment to operate effectively.
- The technical advancement of reforestation techniques, which reduced the cost of planted seedlings from \$18 to \$7 per seedling on average and increased their survival rate from 25 percent to 70 percent on the national level.
- The mapping and interactive GIS online platform covering LRI activities and all national, regional, and local reforestation initiatives and projects managed and implemented by private and public stakeholders. This component's cost-effectiveness ratio could not be calculated, as no direct economic benefits could be identified during the project. However, the component is considered highly cost-effective because of its very reasonable budget, \$142,129 in LRI II (including the administrative cost of overheads), and because this open-source mapping platform enables all relevant stakeholders to plan and implement their reforestation and ecological restoration projects.

LRI II's least cost-effective components were:

- Engaging the private sector in funding reforestation activities was not cost effective because more money than was raised was spent on raising the funds.
- Governance and social stability using community engagement activities and the creation of the SEC CPCs were not cost effective since they did not produce any direct or indirect economic benefits for local communities living in the three established corridors.
- Quarry restoration and climate change actions (to reduce landslide-associated soil degradation) were not cost effective due to the very high budget that was allocated for them and the very limited actions that were implemented. Both components constituted around 14 percent (\$747,734) of the LRI II budget (including the administrative cost of overheads) and were limited to conducting studies and developing action plans for three quarries and two sites prone to climate change impacts. The implementation of a few activities related to these components started in the final quarter of the project's final year and were still not completed when the final evaluation was taking place, but LRI indicated that the remaining work for this component would be completed in the first quarter of 2019.

- The Firewise component consisted of forest roadside cleaning, training, the provision of firefighting tools and equipment, and the development of Firewise action plans. This component's cost-effectiveness ratio could not be calculated or assessed due to the absence of data on direct or indirect economic benefits associated with the implemented activities. The project conducted a Social Return on Investment study on one of the areas where Firewise was implemented, but the results were still not published when the evaluation was taking place.

CONCLUSIONS

The cost-effectiveness of the project's technical segment on reforestation and mapping will increase with time, especially if the advanced seedling production and plantation techniques continue to be adopted by LRI-NGO, CNTPL nurseries, and all concerned public and private entities involved in reforestation projects and initiatives.

Restoring quarries and preventing landslides through terracing is extremely expensive (in the case of quarries, from 10 percent to 30 percent of a company's profit margin). That is why the project's attempt to address the issue on multiple sites with very little implementation was not cost effective.

- How effective was LRI's outreach and communication? How was publicity generated for USAID and the broader Embassy by the activity?

FINDINGS

Despite its limited budget, LRI's outreach and communications campaign was extensive and included a wide range of stakeholders in Lebanon. The LRI team created a Facebook page that attracted more than 7,000 members and conducted six national awareness campaigns. They also implemented out-planting and awareness activities with SECs and religious denominations. LRI's comprehensive website is an integral part of the outreach campaign. The team also developed numerous awareness materials for dissemination.

CONCLUSIONS

LRI's outreach campaign was extremely effective in reaching a wide audience of direct project participants and beneficiaries. It was, however, difficult to determine the campaign's effectiveness on the wider Lebanese population due to a lack of data.

QUESTION 3

Did LRI create/enhance more active environmental awareness and economic involvement of women in the communities where the activities were implemented?

Subquestions

- Did women actively participate in local decision making—e.g., on the municipal environment committees?

FINDINGS

From the first meetings in the field, it was clear to the evaluation team that women's involvement in all LRI activities was considered normal. Although women's participation and inclusion are a USAID requirement and it was stressed that the implementing team were to ensure a high level of women's representation, it was obvious from the participation, confidence, ownership, and leadership roles of the interviewed women that this inclusion was not program-led or activity-driven but rather community-led. In one of the KIs, the interviewee referred to the long-standing role of women as a core and critical element of support for their husbands and families in agriculture. For communities in rural areas, women always had an important role in livelihood support along with men, whether in the fields, orchards, or food-processing facilities. Forestry was not very common for women and there was some resistance in certain instances by husbands or elderly men. For example, the women who ended up being recruited as forest guards in Yammouneh because of the ongoing war in Syria and the participation of many young fighters from their village in that conflict talked about their personal experience in breaking taboos in a conservative community. The women—whom many considered too old to take on the task, especially as they would be required to deal with shepherds, trespassers, and other unforeseen events and individuals—faced a lot of skepticism about their ability to succeed. They saw it as a challenge and their efforts have since proved their skeptics wrong, with stakeholders in the village voicing their appreciation for the good job they have done. For example, the female head of the Bcharre nursery has been appointed president-elect of the CNTPL, which includes 10 nurseries, most of which are led by men.

CONCLUSIONS

The various examples of women's success and leadership, demonstrated by their active participation in CPC and EC strategy meetings and in activities and planning, when coupled with community encouragement, can be of great value for any type of project, even one involving unconventional tasks and roles.

Labor-intensive, dangerous, or very tiresome activities and tasks, such as quarry restoration, did not encourage women's participation. Therefore, no women were present at the FGD held with workers in Mkdoukha.

- Were women encouraged to take on leadership roles in local forest area management?

FINDINGS

Women were encouraged to take on leadership roles as mentioned before, including as the head of the CNTPL, along with other CPC leadership roles. Almost all FGDs had more women participants than men, including the CPC North meeting, the Lebanese/Syrian group, and the Cooperative. There was no baseline clarifying where women stood in terms of these leadership positions before the LRI intervention and as a result, it is not feasible to assess it comparatively except through anecdotal evidence and success stories reported in the field.

CONCLUSIONS

There was no opposition to women's participation in leadership roles in the LRI project. Women were encouraged to take on these roles.

QUESTION 4

What is the likelihood that the results LRI has achieved are sustainable beyond the life of the activity?

Subquestions:

- How sustainable are LRI's activity results likely to be in the medium to long term?

FINDINGS

Sustainable components:

- Nurseries have a high level of sustainability in the medium and long term thanks to the improved organizational, management, and high-quality seedling production capacities that were developed at the nursery level. The creation of the CNTPL and the positive cooperation among its members will sustain the production and marketing of high-quality seedlings and respond to the growing market demand driven by the 40-million-tree national reforestation campaign.
- The advanced out-planting techniques will also be sustainable on the medium and long term due to their adoption by public and private reforestation stakeholders and their recognition by the Ministry of Agriculture as a national reference.
- Private sector engagement in funding reforestation is relatively sustainable but depends on Lebanon's economic stability and the continued level of engagement by LRI-NGO to mobilize private firms and companies and provide them with economic incentives.
- The LRI-NGO shows a high likelihood of sustainability in both the medium and long term as it is now entrenched as the go-to reforestation organization for donors.

Less sustainable components:

- Community engagement through the creation of the CPCs is not sustainable in the medium and long term, mainly because of the changes that occur in municipal councils, the difficulty of implementing long-term planning for environmental issues that are not among the priorities of municipalities, the voluntary work of CPC members that might affect their commitment, the difficulty of converting the CPCs into legal entities that can access funding, and the inability of such structures to ensure funding on their own without the support of the LRI-NGO.
- The climate change actions (soil erosion and landslide prevention) and quarry restoration components are not sustainable in the medium or long term because of their extremely high cost and the difficulty of getting funds. However, the physical approaches that were taken by the project in both components (although unsustainable for larger-scale interventions mainly because of cost), were effective in protecting the sites in the long term.
- Firewise is not sustainable on the medium term due to legal barriers stemming from the outdated forest law of 1949 and the lack of access to funding for implementation. Firewise activities depend highly on municipality—as well as Ministry—willingness to address these issues.

CONCLUSIONS

LRI components' medium- and long-term sustainability should take into consideration the stakeholders' ability to ensure the necessary funding from the public and private sectors to continue, develop, and upgrade the activities—with minimal dependence on donors—and align them with the national legal frameworks.

- Which results show the most prospect of being sustained and why?

FINDINGS

LRI results that have the highest chances of sustainability are:

- The CNTPL and nurseries because they achieved great technical improvements in high-quality seedling production, which were adopted as a national reference. The nurseries have a strong presence on the market and a clear vision for the future, with CNTPL as a key player in reforestation.
- The technical reforestation methods and techniques because of their adoption by public and private stakeholders as national guidelines.
- The online mapping and GIS platform used by the LRI-NGO and other stakeholders to approach donors and leverage new funds.

CONCLUSIONS

The technical aspects of reforestation have a higher prospect of sustainability than the ecological restoration and social and community components, which are both more complex and expensive and necessitate long-term integrated approaches.

- To what extent has the sustainable management of natural resources in Lebanon been developed?

FINDINGS

LRI's interventions have had a limited influence on the sustainable management of natural resources in Lebanon. The project's activities focusing on the technical aspects of reforestation involving seedling production, planting, monitoring, and mapping have been adopted at the national level and serve as a model for reforestation. The other interventions were still in the pilot stage of implementation (Firewise, quarry restoration, and climate change actions), and although they have contributed to the conversation, they have not contributed in any major way to the sustainable management of the country's natural resources.

At the community level, direct project beneficiaries from local communities and municipalities have a better understanding of sustainable natural resource management and will play a key role in the long term in the improved management and protection of Lebanese forests.

CONCLUSIONS

Sustainable forest and natural resource management requires integrated approaches across the technical, community, and policy levels to achieve successful outcomes. Scientific reforestation methods and techniques should be integrated with a community-led management of the planted sites. A favorable enabling regulatory framework should be developed to encourage local communities and private sector entities to engage in sustainable forest management practices.

- How sustainable are the permanent jobs created by the activity? What is the benefit of the short-term seasonal jobs that LRI produces?

FINDINGS

The permanent jobs created by LRI for municipal forest guards are not sustainable for the simple reason that the guards' contracts will end as soon as the project is closed due to the municipalities' inability to fund these jobs on their own.

The short-term seasonal reforestation jobs created through LRI were very beneficial because they complemented the target community's agricultural activities and constituted an additional source of income during the low season of farming in rural areas.

CONCLUSIONS

As long as municipalities and the communities they represent do not see reforestation as a priority, they will not allocate funds to hire guards to protect the forests or conduct reforestation activities. It is therefore unlikely that the permanent jobs created by LRI will be sustainable, and although the seasonal jobs were extremely beneficial to the workers, municipalities cannot fund them.

- Which aspects of LRI's activities are, or are likely to be, the most scalable (i.e., replicable at a declining marginal cost as uptake increases)?

FINDINGS

The most scalable LRI activities are seedling production and out-planting because of the technical capacities that have been developed for the nurseries and NGOs involved in reforestation efforts.

CONCLUSIONS

The scalability of seedling production and out-planting will depend on funding and positive cooperation among local NGOs, donors, and the private and public sectors.

- What aspects of the program demonstrate women's sustainable participation beyond the life of the activity?

FINDINGS

Women's involvement in LRI proved to be very active and sustainable at all levels from planning to activity execution. Women played leadership roles and were the drivers of change in many project components, especially in nursery management and CPCs.

CONCLUSIONS

Women will continue to play a major role in the LRI-NGO and in future projects related to forest management, with different levels of involvement depending on the target areas and type of activities.

RECOMMENDATIONS

QUESTION 5

What recommendations does USAID need to consider for future programming?

Subquestions:

- What were the critical challenges and lessons learned from this program?
- Lebanon's legal framework for forest management dates back to the 1940s and thus does not respond to modern forest management issues. In particular, the legal framework creates barriers to generating real commercial responses to communities through forests, as well as to managing fire threats.
- Most LRI activities require high-intensity management follow-up and involvement. Although the nursery component has developed a reasonably resilient model for future funding as long as there continues to be a drive towards reforestation in Lebanon, all other components depend on availability of funding, with little to no money available for project activities from the national or local governments.
- Social stability is an extremely difficult problem to address, despite efforts of numerous donors and experts. This problem complicates progress in economic growth through forestry.
- Sociopolitical limitations in some of the project's areas create difficulties. For example, neighboring villages with different religious affiliations harbor long-standing animosity, which creates a very sensitive environment to work in. Furthermore, the fact that municipalities change leadership often makes it extremely difficult to develop and maintain long-term plans.
- Effective communications and outreach require a range of expertise, including that of communication companies with large networks. This expertise, along with the engagement of television, radio, and reporter networks, is expensive, and the limited access to funding poses a challenge for reforestation awareness.
- The project did not carry out a comprehensive, community-wide, unbiased needs assessment as this was not mandated in the LRI PAPA, and as a result it was not designed to respond to high-priority needs identified by the community (economic needs and access to water were described as the top-priority needs).
- The project did not use internationally accepted, detailed, and in-depth conflict analysis in each municipality or locality to identify flare points and triggers of instability. This approach is the standard approach used by social stability experts when designing activities, but the project's focus was more on the environmental component.
- The LRI project did not carry out detailed company corporate social responsibility (CSR) profile assessments, so fundraising efforts were not targeted at contributing to companies' CSR certification requirements, such as emission reduction.
- How could the activity design be enhanced to improve the sustainability of LRI's results, and what additional programming or support would improve this sustainability?
- To ensure that communities take part in reforesting public land under the supervision of their municipalities, in-depth community needs assessments and stakeholder analyses are required. In

doing so, the project developer can (and should) design the project to meet the community's real needs while maintaining the integrity of the project's agenda. The LRI project design, for example, responded to introduced or perceived needs and did not consider the real need for economic growth in the communities.

- Future projects of this type, if responding to an economic need, should include economic opportunity for commercial returns from reforestation (e.g., registration and validity of the project in the Voluntary Carbon Standard [VCS] and the Climate Community and Biodiversity Alliance [CCBA] to sell sequestered carbon on the voluntary market [currently valued at around \$7–15 per ton sequestered]). Other issues, such as the need for cheap heating fuel, should also be addressed while making sure that the end goal of reforestation of native species is not compromised. For example, out-planting should include mixed planting of fast-growing, non-native species that are carbon binding, create microclimates for water retention, and provide shade to ensure optimal growth conditions for native species. Fast-growing species are eventually harvested and eliminated, leaving behind strong natural strands of natural forest. This approach addresses ecological, economic, and energy needs.
- Future projects should engage the national government to address barriers caused by legal frameworks. It is unlikely that a project will succeed in the long run if legal frameworks prevent the implementation of the most critical aspects of forest management. It is critical that projects address legal framework issues in parallel with their activities. This also ensures greater buy-in from the national government, which is crucial to the long-term sustainability of the project's activities.
- Increase funding for communication and outreach and use professional organizations with large networks for communication purposes.
- As per the lessons learned section above, in-depth assessments should be mandated in the activity award and implemented by the partner prior to the design of any intervention to respond to specific community needs, identify points of instability, and work towards achieving the project's objectives.
- **What is the best way for USAID to tweak future programs in a way that fits both environmental and social goals?**
 - Projects of this type should target smaller geographic areas to prove the concept over the whole project cycle before expanding to larger geographic areas.
 - Companies in Lebanon are legally required to restore quarry sites to their original ecological condition. This process is extremely expensive and from a donor perspective is not sustainable. Projects should engage with government and the responsible companies to either hold them responsible for the rehabilitation of the quarry sites or to work with them to ensure they provide funds to restore the sites according to their legal obligations.
 - The terracing approach that LRI adopted for landslide prevention is extremely expensive and unsustainable. Future projects should research and pilot cheaper options for this activity.
 - Given the fact that social stability is such a complex problem in Lebanon, the relevant expertise should be engaged in project design and implementation.

- How can the adopted approach be developed to increase women's participation in similar future projects?
- The evaluators found that women's participation was not a problem in Lebanon, and anecdotal evidence showed that women were the leaders in the reforestation sector.
- Both female and male expertise should be used in developing strategies to address social issues in projects in Lebanon.

ANNEX I: INCEPTION REPORT



LRI Final Evaluation
- Inception Report (5

ANNEX 2: DESCRIPTION OF PROJECT ACTIVITIES

PURPOSE I. DIVERSE COMMUNITIES BROUGHT TOGETHER AND SUPPORTED TO PROVIDE STEWARDSHIP OVER THEIR SHARED SOCIAL AND ENVIRONMENTAL CORRIDORS, SUPPORT TWINNING NEIGHBORING COMMUNITIES WITHIN THOSE CORRIDORS, AND ENGAGE SYRIAN REFUGEES IN ADDRESSING COMMON ENVIRONMENTAL ISSUES

The creation of biocorridors (The term biocorridors was later changed to social and environmental corridors (SECs) to better reflect the purpose of the activity.)

The purpose of this activity was to create a mechanism whereby diverse communities could be brought together to form an entity that would work toward the common goal of reforesting connecting corridors and addressing common environmental problems between villages. This would serve as the entry point to create dialogue among communities to create an environment for improved social stability.

Mapping and site selection criteria

LRI worked with GIS specialists to create criteria for the selection of the SECs and subsequently mapped the proposed locations, which included the Rachaiya SEC, the North SEC, and the Shouf Nature Reserve SEC. In coordination with corridor planning committee (CPC) members, municipalities, and other stakeholders, GIS specialists developed maps of the areas that were planted with trees in LRI's first phase as well as ideal areas to be reforested in each of the environmental committee (EC) village areas.

Corridor planning committees

LRI engaged all municipalities in the corridors where public land naturally connected SECs to gauge their interest in forming joint governance boards for the respective SEC CPCs. The project also worked with community groups comprising municipal members, community members, and NGO members. In total, 13 municipalities in the Rachaiya SEC and 11 municipalities in the North SEC opted to form the respective CPCs. The project initially engaged the Shouf Biosphere Reserve and its communities, but it was decided that LRI would engage with them through existing reserve mechanisms (Green Alliance).

Capacity building

- **Planning**

LRI developed the capacity of CPCs by engaging with them through ongoing workshops, training programs, and coaching sessions. The workshops were held to build the CPC members' capacity in reforestation best practices and strategic planning. A series of coaching sessions and internal meetings followed the workshops where draft 10-year strategies and two-year detailed action plans were developed by CPC members for their respective corridors, under LRI's guidance.

- **Proposal writing**

LRI offered training in proposal writing to prepare the CPCs to operate independently and thus sustainably.

Twinning of environmental committees

Early activities of LRI II (year I) included twinning towns. However, this approach was later revised, and joint activity planning and implementation were limited to CPCs. LRI worked with four groups of twinned towns: Rachaiya with Kfar Denis; Ain Aarab with Aanjar; Yammouneh with Ainata; and Hasroun with Bcharre. The selection of these municipalities was based on predefined criteria, including sectarian differences, Syrian refugee pressure, community commitment, and linkages to identified SECs. Twinning activities included roundtable meetings between the twinned villages where five-year plans were developed. These plans included several joint activities, such as cross-village site visits, joint summer camps for village children, the joint development of environmental action plans, joint planting activities, and training courses in reforestation practices. Two-day training workshops on facilitation and organizational skills and project cycle management were organized for the twinned villages. The skills learned at the workshops were designed to enable EC members to promote intersectarian dialogue and share best practices on reforestation and natural resource management.

Syrian links

To address social stability among Lebanese and Syrian refugee communities, LRI focused on two areas of engagement. The first was to ensure that Syrian refugees were given opportunities to work together with Lebanese groups in paid out-planting activities, and the second focused on engagement between Lebanese and Syrian youth groups. The youth groups received training on conflict resolution (particularly around environmental issues), carried out joint planning activities, and implemented numerous joint activities during the life of the project. Several joint Syrian/Lebanese youth groups were established in LRI II.

Monitoring (social stability)

LRI also coordinated with the UN Social Stability Group and the USAID-supported PMSPL program to develop a methodology for social stability assessment in their project areas to determine the effectiveness of the approaches. This methodology was used to measure changes in social stability for the duration of the project.

PURPOSE 2. WATERSHED PROTECTION, RURAL ECONOMIC DEVELOPMENT, AND LIVELIHOOD GAINS FOR SUSTAINABLE COMMUNITIES SUPPORTED THROUGH ENHANCED AND EXPANDED REFORESTATION

Mapping and site selection

LRI developed GIS maps of lands available for reforestation in all towns included in the North and Rashaya SECs, as well as in areas that had previously been reforested by LRI, partner NGOs, and national and international donors.

The CPCs were engaged to develop action plans to reforest areas in their respective corridors, and through community engagement activities, sites were set aside for planting. The CPCs, under the guidance of LRI, developed proposals for the reforestation activities and recruited workers from various communities to do the planting.

Capacity building

All local workers were trained in out-planting best practices and safety on their first day of work. Site supervisors provided refresher training when needed, especially in cases of worker turnover. In addition, training on inspection of planting quality was provided to young men and women from the villages in the project areas. Community youth were also trained on monitoring seedling survival in the field.

Job creation

In total, 927 people benefited from seasonal and permanent jobs in planting and maintenance activities, including people who were trained to conduct inspection and monitoring across all corridor sites. Twenty-seven permanent forest guard jobs were created.

Awareness and community engagement

Beyond the planting activities planned and implemented through the community members who were employed through the project, LRI and the CPCs also organized several voluntary planting events. The following is an example of voluntary activities:

In relation to LRI's strategy to involve women in environmental causes and LRI's purpose to disseminate reforestation best practices to the larger public, LRI celebrated International Women's Day in the Bkassine forest with more than 200 volunteers. These consisted of Bkassine families and youth, scouts, and activists along with civil society representatives, NGOs, and USAID's USP students from different places across the country. The event was held under the auspices of the Municipality of Bkassine, and in collaboration with the USAID-funded Lebanon Industry Value Chain Development (LIVCD) project and University Scholarship Program (USP). It included environmental awareness activities and an exhibition of various women cooperatives from different regions of Lebanon to promote their products. More than 500 native tree seedlings were planted in an open area in Bkassine's pine forest to demonstrate restoration methods. The participants also hiked on the forest's trails, learned about climate change and wildfire prevention, and had the chance to plant pine seedlings at an educational nursery set up by the Cooperative of Native Tree Producers of Lebanon (CNTPL) to promote best practices for tree production.

Increased private sector engagement

- **National fund**

LRI collaborated with FAO-Lebanon and the Forest and Landscape Restoration Mechanisms (FLRM) project to leverage the funding and expertise needed to develop a national fund to support future reforestation efforts. FAO hired two international experts to conduct an assessment to determine the fund's feasibility and create a structure for the funding mechanism. The results of this first mission emphasized the need for a public-private fund, preferentially located and financially managed by the Central Bank, to be used for different landscape restoration purposes.

LRI then developed a draft legal framework for the fund and lobbied the Government for its creation. The final iteration for the fund's development has been submitted to the MOA for comment.

- **Private sector engagement**

Private sector engagement was initiated through a conference titled "The Private Sector Partners with the Public Sector to Share the Responsibility of Restoring Environmental and Social Corridors through Reforestation." As a result of this conference, LRI developed several partnerships with private sector companies for funding selected sites over multiple years. LRI also developed an agreement with a Corporate and Social Responsibility (CSR) consultancy firm with a strong network within the private sector, to support the component in developing its strategy and a solid list of contacts. LRI has since renewed its brochure and website, started working on a separate website section targeted at the private sector and diaspora, and developed its marketing material, including a presentation for the introduction of LRI to the private sector. LRI also developed end-of-year packets to be presented to decision-makers in private sector companies, partner NGOs, and municipalities.

LRI continues to work with the private sector across Lebanon as well as with the Lebanese diaspora to maintain the funding stream for reforestation.

Incentives for planting on religious-denominated land

LRI engaged religious denominations across Lebanon to provide incentives for reforestation on religious lands. Lands owned by religious congregations represent approximately 40 percent of Lebanon's land available for reforestation. Reforestation on land held by religious denominations focused on planting native tree species that would generate income and create jobs for the local communities. LRI used high-profile events to launch reforestation on religious lands. For example:

LRI organized a public event on a religious site in Sarada (a small town near Qlaiaa, Nabatiyeh) to launch a reforestation site under the auspices of a prominent religious figure. The event was attended by UNIFIL and Lebanese Army high ranking officers, El-Qlaiaa and Sarada community members, neighboring municipalities, local associations, and scout groups. The occasion highlighted the importance of reforesting lands owned by religious congregations.

LRI also worked with the CNTPL nurseries to produce olives and figs as two additional agroforestry native species that were earmarked for use on religious-denominated land.

Improved participatory reforestation practices disseminated at scale

LRI worked with partners like Jouzour Loubnan, St. Joseph University, Native Trees Nurseries, AFDC, and the Shouf Biosphere Reserve. The purpose was to share experiences and findings from reforestation efforts and field trials and agree on common practices and future trials to improve reforestation efforts and work toward more cost reduction in reforestation. The major outcome of this collaboration was a coordination of trials conducted by different partners on different types of fencing (individual versus cluster versus full site), on pruning hardwood species before planting to improve their growth and survival, retrying deep pipe irrigation with smaller amounts of water and less expensive material, and experimenting with no-irrigation reforestation on a large scale in regions that showed potential in previous LRI trials.

LRI also provided training sessions that focused on out-planting best practices, inspecting planting quality, monitoring seedling survival, using the "Collector for ArcGIS" and "ArcGIS online," and other related topics. Both men and women benefited from this training throughout the project area, as well as donors, government, and NGO partners.

A high-profile example of this training was LRI's agreement with the Ministry of Agriculture to collaborate with FAO on developing a training program for the ministry's forest guards and the ministry's employees at the Directorate of Natural Resources and Rural Development to be able to effectively play their role in the planning and monitoring of the 40-million-tree campaign.

LRI also provided technical assistance to the Lebanese University Faculty of Agricultural and Veterinary Sciences and the University of Balamand in their planning and implementation of the Agriculture and Rural Development Projects (ARDP) in Kawkaba, Hasbaya, Baalbeck, and Menjez. Similarly, LRI signed an agreement with the American University of Beirut - Nature Conservancy Center (AUB-NCC) on the development of a native nursery seedling production literature and germination protocols for selected native species.

Cost reduction trials

In collaboration with local partners, nurseries, municipalities, and academic institutions, LRI implemented cost reduction trials for reforestation best practices, aiming at sustaining restoration projects

throughout Lebanon. These trials included a deep pipe experiment, a pruning experiment, and Sumac germination trials.

CNTPL effectively contributing to national reforestation activities and playing a leading role in reforestation across the country

LRI supported the CNTPL in several ways to ensure its effective contribution to national reforestation activities:

1. LRI covered the salary of a full-time coordinator for the CNTPL.
2. LRI focused on the CNTPL's institutional and organizational development through several coaching sessions, which included the following: conducting a self-assessment and a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis; establishing the cooperative's vision, mission, and objectives; and setting priority work areas. LRI also coordinated with the USAID-funded farmer-to-farmer project to develop the cooperative's marketing and financial strategy.
3. LRI supported the CNTPL in its marketing efforts and in creating visibility with partners and potential buyers. This included the development of CNTPL's social media strategy, a new Facebook page, website updates, a radio interview, and a video documentary on the CNTPL to be broadcasted on social media and during events. This support led to several orders received by the CNTPL through Facebook and more than 50 calls following the radio interview. LRI also supported the CNTPL's launch in Beirut, under the auspices and in the presence of the Lebanese Minister of Agriculture. The event was attended by representatives of the Ministries of Agriculture and Environment, municipalities and unions of municipalities, private sector companies, local environmental NGOs, academic institutions, international donors, and various reforestation stakeholders.

Raising national awareness on reforestation

LRI presided over a number of high-profile awareness-raising events over the last three years. These included high-profile planting events, public events highlighting the national reforestation campaign, planting events between diverse sectarian communities, planting events with school children, television interviews, and many others.

High-profile examples:

1. **The Lebanese Armed Forces Planting Week.** In collaboration with the Lebanese Armed Forces-Civic-Military Cooperation Directorate (LAF-CIMIC), LRI organized a week-long planting campaign, in ten (10) towns across the country during which LAF officers together with local community members planted a total of 19,400 native tree seedlings. The towns included Aanjar, Rachaiya, Kawkaba Abou Arab, Maqne, Ainata, Bcharre, Tannourine, Kfardebiane, Qlaiaa, and Rmadiye.
2. **The Unipole national campaign** which included six unipole(s) with the collaboration of LAF. It carried awareness messages related to reforestation on major Lebanese highways over the whole month of November 2015. Through this national awareness campaign, LRI intended to increase public interest, ensure the dissemination of out-planting best practices, and instill a national commitment to reforestation.

Developing a web mapping platform

LRI launched the first Lebanon forestry online platform in 2016. The platform was developed in collaboration with seven partners who expressed interest in using and updating it through their own user accounts provided by LRI. These partners include: The Ministry of Agriculture, the Save Energy

Plant Trees (SEPT) NGO, the Chouf Biosphere Reserve, Jouzour Loubnan, the USAID-funded Lebanon Industry Value Chain Development (LIVCD) project, the Committee of the Cedar Forest Friends – Bcharre, and the Lebanese University-Faculty of Agricultural and Veterinary Sciences. LRI provided each of the seven partners with two one-on-one practical training sessions focusing on creating databases on ArcGIS for Desktop and producing web applications on ArcGIS Online. A third training session on using the “Collector for ArcGIS” for data collection and creating story maps was offered to the partners.

LRI promoted the use of specialized mapping tools and adapted technology in native tree reforestation activities and private sector and diaspora engagement in reforestation projects in the country. One of the most novel technologies adopted by LRI was the use of GIS remote sensing software and the ArcGIS Online platform in the reforestation process.

The primary goal of LRI’s web mapping efforts was to enable reforestation specialists to use and share maps and data related to suitable planting sites, site planning and monitoring, vegetation mapping, wildfire prevention, and climate change impact on species distribution and environmental threats by projecting spatial data on environmental and social characteristics onto maps of specific areas of interest. The mapping platform also enabled reforestation stakeholders to reach out to the private sector and the diaspora with reforestation proposals presented as story maps. The platform’s objective was to provide users with maps to:

- Identify suitable planting sites based on different criteria, such as hydrologic conditions, topography, pedology, vegetation.
- Classify vegetation throughout Lebanon to better understand the current extent and species mix of Lebanon’s forests.
- Provide updated and detailed online mapping information about wildfire risks by locality.
- Raise awareness on climate change risks leading to the amplification of environmental threats, namely soil erosion and landslides.
- Incorporate reforestation proposals for private donors and diaspora as story maps to leverage fund for reforestation on public land.

Participatory mapping training

LRI supported the Rachaiya and North CPCs in developing more comprehensive maps of their towns through participatory mapping exercises. Aerial maps of the towns were printed out, and representatives of each town marked important resources that would otherwise be hard to find on official maps. The maps were then digitized and returned as GIS maps to the municipalities and CPCs.

PURPOSE 3. COMMUNITIES EMPOWERED TO ANTICIPATE AND PROTECT THEMSELVES FROM ECONOMIC AND ENVIRONMENTAL THREATS POSED BY WILDFIRES, QUARRIES, AND CLIMATE CHANGE IMPACTS

Firewise

Following the development of the Firewise approach to forest management in the first phase of the LRI project, the team engaged with a selection of municipalities introducing the approach. In the second

phase of the project, LRI posted a call for proposals to NGO-municipality consortia. Several applications were received and an internal LRI committee met and selected six sites that best fit the criteria set for Firewise.

LRI initiated meetings with the selected municipalities to introduce the participants to Firewise and its implementation methodology, focusing on the engagement of the local community in all steps of the process. MOUs were then developed for all sites. LRI collaborated with AFDC to train volunteer squads on firefighting techniques.

In partnership with the USAID-funded farmer-to-farmer project, LRI offered Training of Trainers workshops, which focused on the different steps of technical and social activities conducted under the Firewise program. All representatives were provided with additional tools such as town maps that can be used to conduct participatory mapping exercises with the local communities to locate the important features related to fire prevention in their towns, such as water sources and civil defense offices.

Assessments of the general physical characteristics of each Firewise site were carried out by LRI experts, and recommendations customized to site conditions were developed in line with the best practice guidelines of the Firewise Lebanon program. A fire risk map was also produced for each site.

LRI supported SEEDs Inc. in organizing community roundtables to develop action plans for fire management in the respective towns and management sites. The roundtables showcased the assessment's results and discussed the fire prevention recommendations with the local community. The participants would then work in groups to define the available resources, constraints, risks and needs related to fire prevention in their town. The corresponding NGO would then take the information gathered at the roundtable along with the assessment report and develop a short-term action plan for the town.

Once the Firewise action plans in six target communities had been finalized, LRI conducted follow-up meetings with NGOs and ECs in the villages to start planning the implementation of the activities. Communities then started the implementation of their social and technical activities, such as establishing firebreaks, scalping and cleaning road sides, developing water source maps, installing water storage equipment and fire awareness signage, organizing awareness events in schools and villages, and offering firefighting training sessions.

In order to create awareness of wildfire threats and prevention techniques, a theatrical play called Sanjoub was presented in selected locations across Lebanon. Both Lebanese and Syrian children from all towns involved in the SECs attended the shows.

Quarry restoration

LRI collaborated with the Ministry of Environment for this component. The project first enlisted the help of experts from the MADA NGO to identify potential quarry sites and develop a restoration plan in collaboration with the LRI team.

Sites were selected using the following criteria:

- The rehabilitation's impact on the landscape perception level, ecological functionalities, and on-site human interaction.
The feasibility of the future rehabilitation scheme's execution, including access to the sites, cost, self-healing trends of the ecosystem, geological stability, and market availability of biological materials for the execution.

- Additional considerations such as previous work with the community, potential for cost sharing, and synergies with existing / ongoing projects.

At each selected site, biodiversity assessment sessions were conducted in the presence of local stakeholders with the aim of familiarizing them with the site's biodiversity (fauna and flora), showing them how to spot key elements and understand ecological connectivity challenges and site structure in terms of ecological functionalities, and engaging them in fauna and flora data collection. The steps included:

- Topography assessments using an Unmanned Aerial Vehicle (UAV) platform equipped with a high-resolution calibrated camera and high-accuracy Global Positioning System Inertial Measurement Unit (GPS/ IMU) system.
- Hydrogeology assessments to evaluate the main drainage paths and estimate the expected amount of overflow.
- Biodiversity assessments conducted by experts in the presence of local stakeholders to familiarize the latter with the site's biodiversity (fauna and flora).
- On-the-job training sessions during the benchmarking field visits, and topographic mapping sessions conducted in the presence of local stakeholders.

Concept development sessions were conducted in the presence of local stakeholders to involve the local community in the concept's development. This also included landscape design to create drawings and sketches to illustrate the rehabilitation concept. Final rehabilitation designs were then developed with the participation of local communities.

Landslide prevention

After a lengthy site selection process, which searched for sites with clear signs of erosion or landslides, LRI selected Bkassine (South Lebanon) and Mhaidthe (Rachaiya SEC) to conduct its participatory work on "community resilience to climate change."

LRI also identified local consultants to conduct assessments of soil erosion and landslide risks at these two sites, taking current and future environmental scenarios into consideration.

In both towns, informative meetings were held before each field activity to clarify the procedures that would be followed, which included technical studies of the risks and impacts of the section of the Bkassine pine forest where landslides and severe erosion threatened old and productive trees. The meetings were then followed by action plans developed jointly by technical experts and the local community.

After the implementation of action plans by the local community, people were then consulted to gauge their level of interest in such an undertaking.

An assessment of the social and economic risks on Mhaidthe and Bkassine's community assets affected by potential soil erosion and landslides was conducted by an expert designated by the Food and Agriculture Organization – Forest and Landscape Restoration Mechanism (FAO – FLRM) project through LRI.

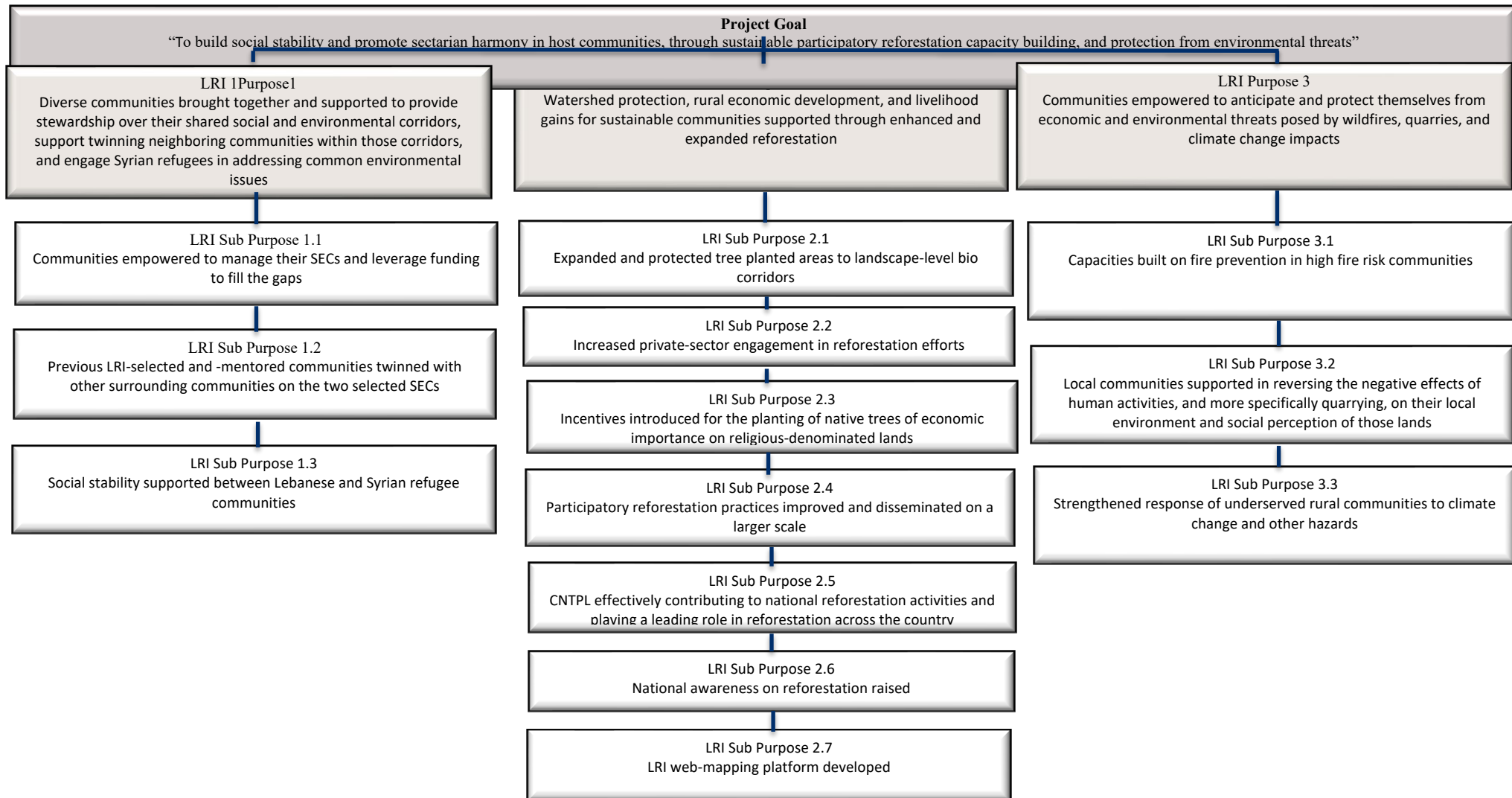
LRI collaboration

- LRI has collaborated with several partners across its components. Aside from its collaboration with local NGOs on the Firewise, out-planting, and nursery components, LRI collaborated with the USAID-funded farmer-to-farmer program on the Firewise component to improve fire

prevention practices, develop a data-collection protocol for vegetation mapping, conduct a financial analysis, and prepare a marketing plan aimed at CNTPL sustainability and independence.

- LRI developed its new monitoring and evaluation (M&E) plan, in addition to a social stability assessment, in close coordination with the USAID-funded PMSPL program.
- LRI has continuously collaborated with the USAID-funded LIVCD program on value chains pertinent to LRI-partner municipalities, while the LIVCD program benefited from the ArcGIS Online training series provided by LRI.
- USAID-supported University Scholarship Program (USP) students were involved in several LRI activities, mostly in LRI's national campaign and international women's day celebration. The latter was in fact accomplished in partnership with both LIVCD and USP.
- The LRI-NGO was selected for support by the Building Alliances for Local Advancement, Development and Investment – Capacity Building Program (BALADI CAP). Through the program, the LRI-NGO built its internal structure for improving the chances of its sustainability post 2018.
- LRI has also collaborated with FAO at several different levels:
 - The FAO – FLRMP project. LRI collaborated with FAO – FLRMP on two of its components: the development of the national forestry fund and the “community resilience to climate change” work. Both included cost share of expenses and exchange of knowledge and expertise.
 - FAO's new Technical Cooperation Program (TCP) on coordination and technical assistance. LRI coordinated with FAO and the Ministry of Agriculture on producing unified guidelines for reforestation best practices; providing technical assistance to the ministry to improve its nurseries' production (in collaboration with CNTPL); training forest guards and employees involved in the 40-million-tree campaign on inspection, monitoring, and surveying of reforestation sites; and supporting the production of a unified map of potential reforestation sites in Lebanon.

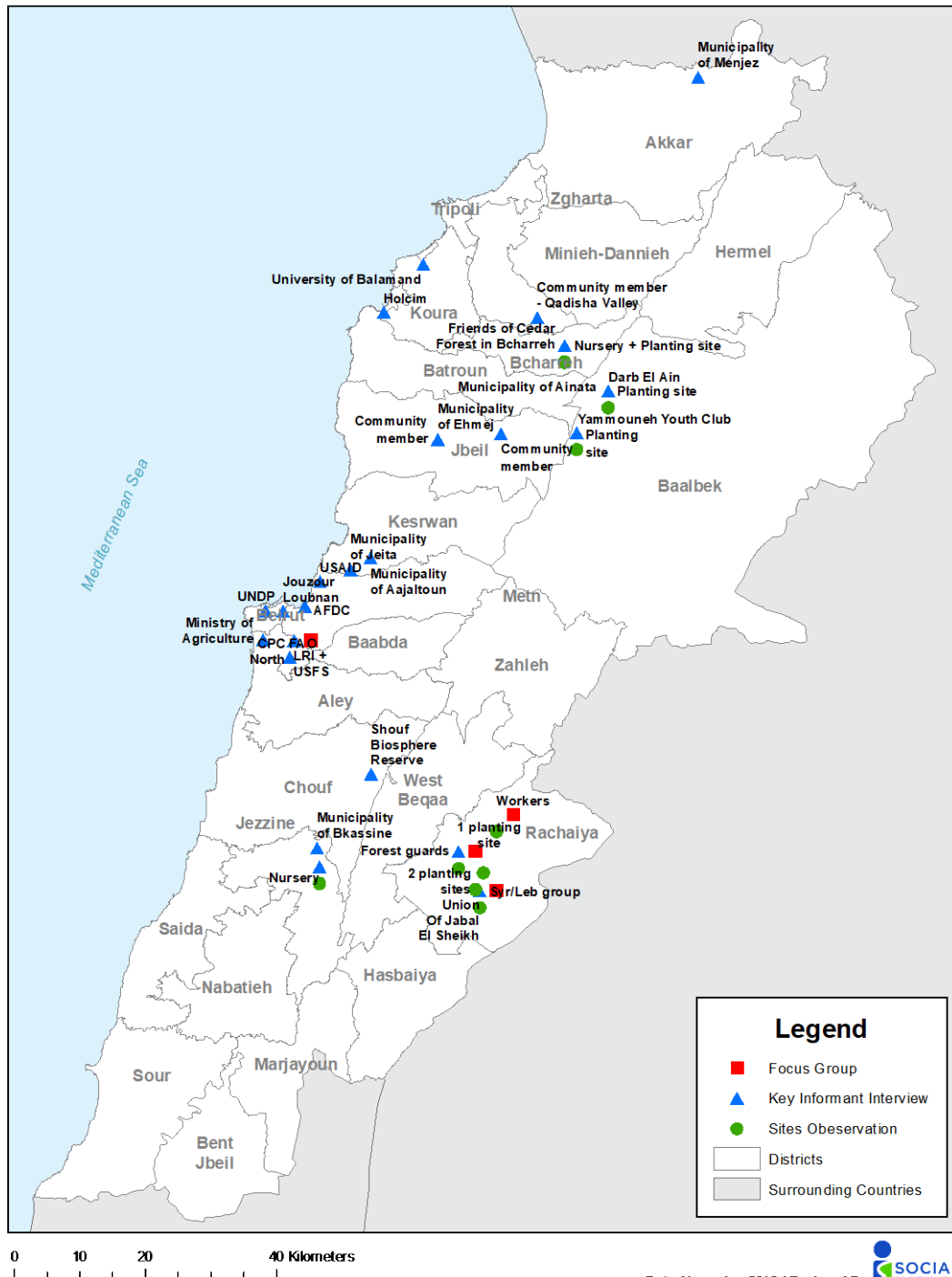
ANNEX 3: RESULTS FRAMEWORK



ANNEX 4: DISTRIBUTION OF KIIs AND FGDs

LRI Activities

Sites' Visits



ANNEX 5: INTRODUCTION TO EVALUATION QUESTIONS

Introduction to Question I

Lebanon National Forest Plan

The Lebanon National Forest Plan (2015 – 2025) sets forth a 10-year strategy that aims to sustainably manage the Lebanese Forest Resources by operationalizing activities in Lebanon to reach eight objectives, namely: 1) establishing and updating national data on the forest and rangeland sectors and promoting research through the establishment of partnerships between different sectors; 2) strengthening the governance of forestland through setting up adapted mechanisms for direct responsiveness, efficient accountability, and active communication; 3) setting up sustainable management in forests and establishing restoration and rehabilitation plans in degraded lands to counteract soil erosion and desertification; 4) enhancing ecosystem resilience in forestland to mitigate the impact of climate change and other natural hazards; 5) supporting small enterprises through the development of value chain standards for sustainable production of forests and rangeland value added goods; and 6) launching and supporting green economic opportunities through the establishment of the needed infrastructure to improve related services of forests and rangelands.

USAID/Lebanon CDCS

The USAID Country Development Cooperation Strategy (CDCS) proposes an overarching goal of “*improved accountability and credibility of public institutions, and broader economic prosperity.*” This goal supports the broader U.S. objective of achieving stability in Lebanon and aligns with various Government of Lebanon strategy pronouncements.

USAID’s Development Objective 1, *Improved capacity of the public sector in providing transparent, quality services across Lebanon*, reflects a program emphasis on enhancing the quality and availability of basic education, addressing water quality and municipal-level service delivery issues, promoting accountability and transparency in public institutions, and strengthening the ability of nongovernmental organizations and civil society in general to effectively participate in and contribute to democratic governance.

USAID’s Development Objective 2, *Inclusive economic growth enhanced*, reflects an emphasis on increasing the competitiveness of Lebanon’s private sector by strengthening the advocacy role of business associations, improving trade linkages, increasing access to finance credit especially in rural areas, addressing labor market issues, and providing job-focused formal higher education and technical training for vulnerable groups.

Social stability

Social stability needs vary widely among Lebanese communities because of the character of the communities, historical grievances and incidents, and local or regional political stressors and the heavy presence of Syrian refugees. The Lebanese community comprises 18 different sects, a fact that has always been a reason for competition over power and resources and led to a 15-year-long civil war between 1975 and 1990. The war took a heavy toll, with more than 250,000 dead and millions displaced or relocated within the country. This essentially changed the country’s demographic and created a new

set of issues among communities over land ownership and control. Today, almost 30 years after the end of the civil war, some communities continue to reference it as the reason for strife between the Lebanese. This is due to the lack of proper grassroots or communal reconciliation efforts involving the wider community that was directly affected by it. The Syrian Arab Army also played a major role during the civil war and the post-war period until its withdrawal from the country in 2005; it managed, however, to maintain a strong influence on Lebanon's internal politics. This is one of the reasons the Lebanese host communities are divided in how they deal with the Syrian refugee crisis. Even some of those who supported the uprising in Syria in 2011 against the Assad regime were hesitant to welcome those fleeing the regime's atrocities, mainly because of a long history of animosity and lack of trust toward Syrians.

- The social stability issues in Lebanon can be divided into two major categories:
 - Lebanese/Lebanese issues, both long-standing and recent, that can be sectarian, confessional, historical, political, resource-driven, or geographic.
 - Lebanese/Syrian issues that are mainly socioeconomic, with perceived competition over jobs ranking first, as well as animosity deriving from the unsettled history of the war.

To develop sound and well-received interventions for social stability, a conflict analysis should be conducted, incorporating key stakeholder opinions, perceptions, and sometimes recommendations, before developing activities.

Community needs

A fundamental prerequisite of successful participatory programs at the community level is shifting control and accountability from central authorities to the community.

For a community group to function successfully, several criteria must be met: the group must address a felt need and a common interest; the benefits to individuals of participating in the group must outweigh the costs; the group should be embedded in the existing social organization; it must have the capacity, leadership, knowledge, and skills to manage the task; and it must own and enforce its own rules and regulations. It is therefore imperative to design development programs that respond to real community needs rather than perceived or introduced needs.

Targets versus results

LRI's overall objective was "to build social stability and promote sectarian harmony in host communities, through sustainable participatory reforestation capacity building, and protection from environmental threats." The project had three purposes:

1. Purpose 1: Diverse communities brought together and supported to provide stewardship over their shared social and environmental corridors, support twinning neighboring communities within those corridors, and engage Syrian refugees in addressing common environmental issues.
2. Purpose 2: Watershed protection, rural economic development, and livelihood gains for sustainable communities supported through enhanced and expanded reforestation.
3. Purpose 3: Communities empowered to anticipate and protect themselves from economic and environmental threats posed by wildfires, quarries, and climate change impacts.

Introduction to Question 2

Forest ecosystems in Lebanon have undergone continuous degradation that has led to intense fragmentation, significant loss of ecological integrity, and threats to their various functions and services. Lebanon's forests, covering around 13 percent of the Lebanese territory, are increasingly exposed to degradation as a result of illegal quarries, uncontrolled urbanization, pests and diseases, fires, overgrazing, improper management, outdated laws, and poor law enforcement. Fire and climate change impacts are the most destructive elements to Lebanon's forest ecosystem. Moreover, the absence of an integrated national forest management policy and the lack of financial and technical resources contribute to the continued degradation of the country's forests and complicate efforts to address these threats.

Reversing environmental degradation by reforesting grasslands, burned forests, and bare lands is a challenging task in Lebanon's complex and ever-changing socioeconomic context. This task requires a comprehensive approach that integrates the goal of restoring forest ecosystem services and functions with specific objectives related to forest landscape, livelihoods and economic value of forests, land ownership issues and conflicts, climate change mitigation and adaptation, and community engagement and cooperation between the public and private sectors to ensure sustainable management and protection. Reforested lands require adaptive management approaches to create dynamic and resilient ecosystems that can withstand the stresses of climate change, habitat fragmentation, and other anthropogenic effects such as grazing.

Introduction to Question 3

Women in Lebanon face a myriad of challenges, including the lack of proper laws to protect them against gender-based violence and child marriage, issues related to them not being able to give citizenship to their children if they were married to non-Lebanese citizens, their weak participation in the political arena, and more. Women advocacy groups have been able to record some small victories, such as the recent legislation on so-called dignity crimes and rape; however, Lebanon continues to lag behind other regional and international countries in legislation on women's rights and political participation. On the other hand, although accurate data and numbers are lacking, women have been part of the labor force for quite some time in Lebanon, especially in rural and agricultural communities. In these communities, all family members participate in almost all agricultural processes, from planting to harvesting, storing to processing, and all other related activities. In a patriarchal society, women are not always decision makers in the presence of their husbands, but their role has been instrumental in the agriculture sector. Recently, more women are taking leadership roles in cooperatives and NGOs that work on rural development. Rural cooperatives, for instance, provide major platforms where women are engaged and offered job opportunities.

Although women's participation in the political arena continues to be hindered for a range of reasons, including the lack of support from political parties and the lack of access to relevant resources, women are emerging as leaders in many other domains, including the private sector, such as banking, education, health, entrepreneurship, and civil society.

Introduction to Question 4

Project sustainability depends on many factors, including a) LRI's ability to continue to engage with project stakeholders at the current level of intensity, b) the continued availability of a market for native seedlings, c) CNTPL's ability to access the market and maintain the production of quality seedlings, d) continued access to funding through the private sector, and e) a heightened level of cooperation with the national government.

ANNEX 6: EVALUATION INTERVIEW DETAILS

[Redacted]

ANNEX 7: DOCUMENTS REVIEWED

Type of Document	
1. Contract & Modifications	PAPA Modification number 7
	PAPA Modification number 12
2. Work Plans & PMP	LRI II Work Plan (Oct. 15 – Sept. 16)
	LRI II Work Plan (Oct. 16 – Sept. 17)
	LRI II Work Plan (Oct. 17 – June 18)
	LRI MEL Plan August 2018
	LRI Phase I Final Evaluation Report
3. Progress Reports	LRI II Quarterly Report (July – Sept. 2015)
	LRI II Quarterly Report (Oct. – Dec. 2015)
	LRI II Quarterly Report (Jan. – March 2016)
	LRI II Quarterly Report (April – June 2016)
	LRI II Quarterly Report (Jan. – March 2017)
	LRI II Quarterly Report (April – June 2017)
	LRI II Quarterly Report (Oct. – Dec. 2017)
	LRI II Quarterly Report (Jan. – March 2018)
	LRI II Quarterly Report (April – June 2018)
	LRI II Quarterly Report (Oct. – Dec. 2018)
Other Reports	Draft Baseline Social Stability Assessment Report (SSA) North and Rachaiya SEC's (January 2017)
4. Related Documents (Reports and Publications)	Ark and UNDP “Regular Perception Surveys on Social Tensions throughout Lebanon: Wave II” January 2018
	AUB (no date). A Case Study on Lebanon’s National Strategy for Forest Fire Management. http://website.aub.edu.lb/ifi/public_policy/rapp/rapp_research/Documents/cs_lebanon_forest_fire_management/20111031ifi_rapp_lebanon_forest_fire_policy.pdf
	ECODIT Lebanon 2009 Forest & Biodiversity Conservation Assessment – Final Report

	http://www.usaidgems.org/Documents/FAA&Regs/FAA118119ME/Lebanon/ECO DIT Lebanon Forest and Biodiversity Assessment - Final Report (1).pdf
	Ministry of Environment-Lebanon. 2015. Fifth National Report of Lebanon to the Convention on Biological Diversity https://www.cbd.int/doc/world/lb/lb-nr-05-en.pdf
	Ministry of Environment-Lebanon (2014). Lebanon Environmental Assessment of the Syrian Conflict & Priority Interventions
	Ministry of Environment-Lebanon (2015). Economic Costs to Lebanon from Climate Change: A First Look.
	MOA (2013). National Afforestation/Reforestation Programme 40 Million Forest Trees Planting Programme.
	A new development goal for Lebanon http://www.efimed.efi.int/files/attachments/efimed/events/scisem_2013/05.mohanna_new_development_goal_for_lebanon.pdf
	MOA (2015). Lebanon National Forest Plan 2015-2025 http://extwprlegs1.fao.org/docs/pdf/leb163865.pdf
	Lebanon's Second National Communication to the United Nations Framework Convention on Climate Change http://climatechange.moe.gov.lb/viewfile.aspx?id=66
	Lebanon Reforestation Initiative (A guide to Reforestation Best Practices) 2014 https://lri-lb.org/sites/default/files/AGuidetoReforestationBestPractices.pdf
	FAO/GEF. Smart Adaptation of Forest Landscapes in Mountain Areas (SALMA). Project document https://www.thegef.org/sites/default/files/project_documents/7-8-16_-_ProDoc.pdf
	FAO (2016). Assessment of the socio-economic value of the goods and services provided by Mediterranean forest ecosystems.
	UNDP (2018) Aarsal and its surrounding villages: A New Dawn article
	Sarkissian, A. J.; Brook, R. M.; Talhouk, S. N.; Hockley, N. J. (2017). Asset-building payments for ecosystem services: assessing landowner perceptions of reforestation incentives in Lebanon. Forest Systems, Volume 26, Issue 2, e012. https://doi.org/10.5424/fs/2017262-10325
	Laithy, H; Abu – Ismail, K and Hamdan, K. (2008) International Poverty Center Country Study Poverty, Growth and Income Distribution in Lebanon
	Ministry of Agriculture Lebanon National Forest Plan 2015 - 2025
	Masri, T.; Khawlie, M. and Faour, G. (2002) Land Cover Change Over the Last 40 Years in Lebanon. Lebanese Science Journal, Volume 3, No 2 (2002)
	Darwish, Talal & Faour, Ghaleb. (2008). Rangeland degradation in two watersheds of Lebanon. Lebanese Science Journal. 9.

	Kukrety, N. (2016) Power, Inequality and Social Protection in Lebanon. Oxfam and Issam Fares Institute of American University Beirut
6. Websites	Lebanon Reforestation Initiative (accessed October 2018) https://lri-lb.org/about.php - about
	Food and Agriculture Organization of the United Nations (Forest and Landscape Restoration in Lebanon) (Accessed October 2018) http://www.fao.org/in-action/forest-landscape-restoration-mechanism/resources/detail/en/c/412643/
7. Other	LRI Gender in Forestry PPT.
	LRI Gender Analysis summary of findings

ANNEX 8: DATA COLLECTION INSTRUMENTS

Coversheet for All Protocols

Date of Interview:	Interviewee Name, Title:		
Team:	Time Start:	Time End:	
Interviewer(s):	Location		
Category of Interviewee:		Age Group:	
No. of Interviewees	_____	M _____ F _____	Ethnic Group:

Introduction: Good morning/afternoon and thank you for taking the time to speak with us today. As mentioned during our interview request, we are working for Social Impact carrying out an independent performance evaluation of the USAID/Lebanon LRI II project. The evaluation is intended to provide an informed assessment of the programs overall effectiveness and relevance.

Our team has had the opportunity to review some background documents to get a better sense of the design and implementation of the project. However, these documents can only tell us so much. We would like to speak with you today to hear about your experience, in your own words, in order to help us better understand how these projects look and function “on the ground.”

Confidentiality Protocol

- We will collect information on individuals’ names, organizations, and positions. A list of key informants will be made available as an annex to the final evaluation report, but those names and positions will not be associated to any particular findings or statements in the report.
- We may include quotes from respondents in the evaluation report, but will not link individual names, organizations, or personally identifiable information to those quotes, unless express written consent is granted by the respondent. Should the team desire to use a particular quote, photograph, or identifiable information in the report, the evaluators will contact the respondent(s) for permission to do so.
- All data gathered will be used for the sole purposes of this evaluation and will not be shared with other audiences or used for any other purpose.
- Your participation in this interview is voluntary and if you do not feel comfortable answering a particular question please let us know and we will simply go on to the next question.

Once again, thank you for taking the time to speak with us today. Do you have any questions for us before we get started?

Inform interviewee we may follow-up with brief email survey at the end of fieldwork.

Evaluation Questions and Extended Questions

1. To what extent is the activity relevant to the needs of people in rural communities in respect of building social stability and improving sustainable management of resources?

- a) To what extent are the activity goals, purpose and objectives/results aligned to support the country's national reforestation strategy and the USAID CDCS?
 - What did the project do to improve governance in addressing citizens' needs in public service delivery?
 - How has the project worked towards a strengthened civil society contributing effectively to participatory and democratic governance?
 - How has the project increased private sector competitiveness?
- b) To what extent did LRI conduct activities in line with their approved work plan (de jure vs de facto)? (Were they able to do what they set out to do?)

Questions for activity area:

Expand and protect tree-planted areas to landscape-level bio-corridors that provide economic benefits, and coordinate other donor- and national government-funded planting initiatives

- Has the project been effective in expanding and protecting the area of planted trees?
- Has the project been able to expand the number of landscape level bio-corridors?
- How many tree-planted areas has the project expanded to?
- What is the cumulative size of this area?
- What efforts have been taken to coordinate other donor- and national government-funded planting initiatives?
- What has been the result of these efforts?

Increase the private sector's engagement in reforestation efforts by supporting the establishment of a Reforestation Fund, developing proposals for specific reforestation projects, and using the LRI website as a fundraising platform

- What has the project done to support the establishment of a reforestation fund and what is the result of these efforts?
- What proposals have been developed for specific reforestation projects? (please specify how many and the results of these efforts)
- How has the project used the LRI website as a fundraising platform and what has the result of this been?

Introduce incentives for the planting of native trees of economic importance on religious-denominated lands to promote reforestation and rural economic development.

- What incentives have been introduced for the planting of trees of economic importance on religious-dominated lands? (what has been the result of this)
- What is the economic importance of these trees?
- How has this promoted rural economic development? (what are the results)

Build capacity in participatory reforestation best practices, including monitoring and evaluation protocols, cost-reduction strategies, and natural-resources mapping approaches to Lebanese and regional forestry practitioners.

- What has the project done to build capacity in participatory reforestation practices? (what evidence is there of this?)
- What cost reduction strategies have been used for the project? (What are the results of these cost-reduction strategies)

Develop and expand business reach of the Cooperative of Native Tree Producers of Lebanon and strengthen its commercialization and institutional capacity.

- How has the project developed and expanded the reach of the Cooperative of Native Tree Producers in Lebanon? What has been the result?
- What has the project done to strengthen the commercialization and institutional capacity of the organization?

Conduct national awareness campaigns on reforestation topics to increase public interest, improve the potential for private sector support, support dissemination of best practices, and instill a national commitment to reforestation.

- What and how many national awareness campaigns has LRI conducted and what is the perception of the results of these campaigns?

Further develop LRI's web-mapping platform to continue to serve as a hub for coordination of reforestation activities nationwide, and to add complementary tools for education and fundraising to support vulnerable communities through private- and diaspora-funded reforestation initiative

- What further development has taken place on the web-mapping platform?
- Have complimentary tools for education been added? What are these tools?
- Have complimentary tools been added for fundraising? What are these tools?

- c) To what extent did the activity's technical assistance answer and/or address the real needs within the intervention areas?
- How did the project determine the real needs of the activity intervention areas?
 - What activities were these? (is there any evidence of results?)

2. How and to what extent has the activity achieved the planned results?

- a) What are LRI's headline outcomes and achievements? How have these been documented and analyzed?
- Which components of the project stand out as the most significant?
 - What were the indicators used to determine success?
- b) To what extent has the activity achieved its outcomes and stated purposes?
- To what extent did the project achieve its purpose and stated outcome to build stability and create social harmony?
 - To what extent did the project meet its purpose and stated outcome in reforestation and restoration efforts?
- c) What are the main factors that influenced positively or negatively LRI's ability to achieve these purposes?
- What hindrances did the project encounter in achieving its stated purpose and outcomes?
 - What instances and environments helped the project to achieve its stated purpose and outcomes?
- d) What impact did LRI have on the reforestation sector?

• Reversing environmental degradation by reforesting previously forested grasslands, shrub-lands, and areas burned by wildfires; - What was the baseline and what indicators were used to measure environmental degradation? - What changes have been observed over the life of the project? • Community engagement to protect the community environment; - To what extent did community engagement lead to improved protection of community environments? - How did community engagement lead to improved protection of the environment? • Private-sector engagement through native-tree nurseries, and private-sector support for out-planting; - How was the private sector engaged in the project? - How much money was raised to support project activities? • LRI NGO engagement in native tree nurseries - How did LRI NGO engage in support for native tree nurseries? - What were the results of this engagement? • Advanced planting techniques, resulting cost/benefit, and out-planted seedling survival on reforestation? - What and how were advanced planting techniques introduced? - How did this effect out-planting seedling survival? e) What evidence is there that social-stability has improved as a result of reforestation projects in identified communities? - What indicators were used to measure changes in social-stability as a result of the reforestation projects? - Give examples of instances where there were indications of improved social stability. f) Which aspects of the program were relatively more or relatively less cost-effective toward achieving the activity goal? - What aspects of the program were cost effective? Why? - What aspects of the program were not cost effective? Why? g) How effective were LRI's outreach and communication? How was the publicity generated for USAID and the broader Embassy by the activity? - What did LRI do for outreach and communication? - What evidence is there that this outreach and communication created more opportunity for project funding and project activity?	3. Did LRI create/enhance more active environmental awareness and economic involvement of women in the communities where the activities were implemented? a) Did women actively participate in local decision-making, e.g. in the municipal environment committees? - What percentage of women were included in decision-making bodies? - What examples are there of the implementation of women-led decisions? b) Were women encouraged to take on leadership roles in local forest-area management? - How were women encouraged to take on leadership roles? - What evidence is there that women did take on these roles? 4. What is the likelihood that the results LRI has achieved are sustainable beyond the life of the activity? a) How sustainable are LRI's activity results likely to be in the medium to longer term? - What actions have been taken to ensure activity results are likely to be sustainable? - What follow-up, if any, has been planned to ensure the sustainability of the results? b) Which results show the most prospect of being sustained and why? - What results show the most prospect of sustainability? - Why are these results likely to be sustainable? c) To what extent has the sustainable management of natural resources in Lebanon been developed? - How has the project contributed to the sustainable management of resources in Lebanon? d) How sustainable are the permanent jobs created by the activity? What is the benefit of the short-term seasonal jobs that LRI produces? - How many permanent jobs has the project created? - Who is going to fund these jobs in the future?
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- How many seasonal jobs have been created by the project activities? - What is the significance of this in terms of livelihood support for households? e) Which aspects of LRI's activities are or are likely to be the most scalable? (i.e. – Replicable at a declining marginal cost as uptake increases). - What components of the project are replicable? - How will the uptake increase? - How will this be funded? f) What aspects of the program demonstrate women sustainable participation beyond the life of the activity? - How have women been included in the different components of the project's programs? - What is the representation of women in permanent paid positions? - What is the likelihood that women will be included in seasonal jobs in the future?
5. What are the recommendations for USAID that need to be taken into consideration for future programming?
a) What were the critical challenges and lessons learned from this program? b) Provide recommendations on how the activity design could be enhanced to improve the sustainability of results, and any additional programming or support in the upcoming years that would improve LRI's results sustainability. (E.g. - What is the outlook for sustaining the Cooperative of Native Tree Nurseries in Lebanon?) c) What is the best way for USAID to tweak future programs in a way that fits both environmental and social goals? d) Offer recommendations to build on the adopted approach to increase women participation in future similar projects.

WOMEN FOCUS GROUP GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
Q1.	Did the project respond to the real needs of women in the community through the activities you have been part of?	Yes	No
Q1.1	If yes, what are these needs and how did the activities respond to them?		

Q2.	What were the main activities that you participated in and what was your level of involvement?		
Q3.	How has the project worked towards including women in a strengthened civil society contributing effectively to participatory and democratic governance?		
B: Effectiveness			
Q5.	In your opinion, what are LRI's headline outcomes and achievements in terms of women's participation in the project?		
Q6.	To what extent did the project achieve its purpose and stated outcome to build stability and create social harmony?		
Q6.1	What are the positive factors that influenced the ability to achieve the stated purposes?		
Q6.2	What are the negative factors that influenced the ability to achieve the stated purposes?		
Q7.	Has the project been effective in the activities that women participated in?		
C: Sustainability			
Q8.	Are there prospects of sustainability for the work women have done under the ECs or CPCs after the project ends?	Yes,	No
Q8.1	If Yes, what are these and how can you work on building on them or strengthening them?		
D: Gender			
Q9.	How do you understand the role of women in the project?		
Q10.	What were the difficulties of your inclusion? How were these solved?		
Q11.	Were women encouraged to take on leadership roles in local forest-area management?		

	(Can you give some examples?)	
Q12.	Were women included in paid roles in the project's activities?	
D: Recommendations		
Q13.	What in your opinion were the critical challenges and lessons learned from the project?	
Q14.	Are there any areas of the project that you feel could have been done in a better way?	

ENVIRONMENTAL COMMITTEE FOCUS GROUP GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
		Yes	No
Q1.	Did the project respond to the real needs of your village through the activities you have been part of?		
Q1.1	If yes, what are these needs and how did the activities respond to them?		
Q2.	What were the main activities that your EC participated in and what was your level of involvement?		
Q3.	How has the project worked towards a strengthened civil society in your village contributing effectively to participatory and democratic governance?		
B: Effectiveness			
Q5.	In your opinion, what are LRI's headline outcomes and		

	achievements in terms of village-based project activities?		
Q6.	To what extent did the project achieve its purpose and stated outcome to build stability and create social harmony?		
Q6.1	What are the positive factors that influenced the ability to achieve the stated purposes?		
Q6.2	What are the negative factors that influenced the ability to achieve the stated purposes?		
Q7.	Has the project been effective in expanding and protecting the area of planted trees and other environmental actions in your village?		
C: Sustainability			
Q8.	Are there prospects of sustainability for the work you have done under the EC after the project ends?	Yes,	No
Q8.1	If Yes, what are these and how can you work on building on them or strengthening them?		
D: Gender			
Q9.	How do you understand the role of women in the project?		
Q10.	What were the difficulties of their inclusion? How were these solved?		
Q11.	Were women encouraged to take on leadership roles in local forest area management? (Can you give some examples?)		
Q12.	Were women included in paid roles in the project's activities?		
D: Recommendations			
Q13.	What in your opinion were the critical challenges and lessons learned from the project?		

Q14.	Are there any areas of the project that you feel could have been done in a better way?	
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CORRIDOR PLANNING COMMITTEE FOCUS GROUP GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
Q1.	Did the project respond to the real needs of your communities through the activities you have been part of?	Yes	No
Q1.1	If yes, what are these needs and how did the activities respond to them?		
Q2.	What were the main activities that your CPC participated in and what was your level of involvement?		
Q3.	How has the project worked towards a strengthened civil society in your communities contributing effectively to participatory and democratic governance?		
B: Effectiveness			
Q5.	In your opinion, what are LRI's headline outcomes and achievements in terms of corridor project activities?		
Q6.	To what extent did the project achieve its purpose and stated outcome to build stability and create social harmony?		

Q6.1	What are the positive factors that influenced the ability to achieve the stated purposes?		
Q6.2	What are the negative factors that influenced the ability to achieve the stated purposes?		
Q7.	Has the project been effective in expanding and protecting the area of planted trees and other environmental actions in your village?		
C: Sustainability			
Q8.	Are there prospects of sustainability for the work you have done under the CPC after the project ends?	Yes,	No
Q8.1	If Yes, what are these and how can you work on building on them or strengthening them?		
D: Gender			
Q9.	How do you understand the role of women in the project?		
Q10.	What were the difficulties of their inclusion? How were these solved?		
Q11.	Were women encouraged to take on leadership roles in local forest-area management? (Can you give some examples)		
Q12.	Were women included in paid roles in the project activities?		
D: Recommendations			
Q13.	What in your opinion were the critical challenges and lessons learned from the project?		
Q14.	Are there any areas of the project that you feel could have been done in a better way?		

YOUTH GROUP FOCUS GROUP GUIDE

Name of Facilitator	
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Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
Q1.	Did the project respond to the real needs of youth through the activities you have been part of?	Yes	No
Q1.1	If yes, what are these needs and how did the activities respond to them?		
Q2.	What were the main activities that your youth group participated in and what was your level of involvement?		
B: Effectiveness			
Q5.	In your opinion, what are LRI's headline outcomes and achievements in terms of youth group activities?		
Q6.	To what extent did the project achieve its purpose and stated outcome to build stability and create social harmony?		
Q6.1	What are the positive factors that influenced the ability to achieve the stated purposes?		
Q6.2	What are the negative factors that influenced the ability to achieve the stated purposes?		
Q7.	Has youth group involvement been effective in expanding and protecting the area of planted trees and other environmental actions in your village?		

C: Sustainability			
Q8.	Are there prospects of sustainability for the youth group after the project ends?	Yes,	No
Q8.I	If Yes, what are these and how can you work on building on them or strengthening them?		
D: Gender			
Q9.	How do you understand the role of young girls and boys in the project?		
Q10.	What were the difficulties of including girls, if any? How were these solved?		
Q11.	Were girls encouraged to take on leadership roles in youth group activities? (Can you give some examples?)		
Q12.	Were girls included in paid roles in the project's activities?		
D: Recommendations			
Q13.	What in your opinion were the critical challenges and lessons learned from the project?		
Q14.	Are there any areas of the project that you feel could have been done in a better way?		

NURSERY COOPERATIVE FOCUS GROUP GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
Q1.	Did the project respond to the real needs of native-tree nurseries through the activities you have been part of?	Yes	No
Q1.1	If yes, what are these needs and how did the activities respond to them?		
Q2.	What were the main activities that the cooperative participated in and what was your level of involvement?		
B: Effectiveness			
Q5.	In your opinion, what are LRI's headline outcomes and achievements in terms of the nursery cooperative activities?		
Q6.	To what extent did the project achieve its purpose and stated outcome to build and transfer knowledge and expertise in the production and marketing of native trees?		
Q6.1	What are the positive factors that influenced the ability to achieve the stated purposes?		
Q6.2	What are the negative factors that influenced the ability to achieve the stated purposes?		
Q7.	Has the nursery cooperative's involvement been effective in producing high-quality seedlings and finding markets for native species?		
C: Sustainability			
Q8.	Are there prospects of sustainability for the cooperative after the project ends?	Yes,	No
Q8.1	If Yes, what are these and how can you work on building on them or strengthening them?		

Q9.	What is the prospect of sustainability in the native-tree market?	
Q10.	What is the prospect of maintaining the quality of seedling production after the project ends?	
D: Gender		
Q11.	How do you understand the role of women in the cooperative?	
Q10.	What were the difficulties of including women, if any? How were these solved?	
Q11.	Were women encouraged to take on leadership roles in cooperative activities? (Can you give some examples?)	
Q12.	Were women included in paid roles in the project's activities?	
D: Recommendations		
Q13.	What in your opinion were the critical challenges and lessons learned from the project?	
Q14.	Are there any areas of the project that you feel could have been done in a better way?	

FOREST GUARDS FOCUS GROUP GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation the following questions will be asked:

A: Relevance			
Q1.	What are the needs that your position responds to in terms of forest management and protection?		
Q2.	What were the main activities that the forest guards participated in and what was your level of involvement?		
B: Effectiveness			
Q5.	In your opinion, what are LRI's headline outcomes and achievements in terms of protecting forests and planted sites?		
Q6.	To what extent did the project achieve its purpose and stated outcome to protect forests and planted sites?		
Q6.1	What are the positive factors that influenced the ability to achieve the stated purposes?		
Q6.2	What are the negative factors that influenced the ability to achieve the stated purposes?		
Q7.	Has the forest guards' involvement been effective in protecting forests and planted sites?		
C: Sustainability			
Q8.	Are there prospects of sustainability for forest guards after the project ends?	Yes,	No
Q8.1	If Yes, what are these and how can you work on building on them or strengthening them?		

Q9.	What is the prospect of sustainability for forest and planted site protection?	
D: Gender		
Q11.	How do you understand the role of women in forest protection?	
Q10.	What were the difficulties of including women, if any? How were these solved?	
Q11.	Were women encouraged to take on leadership roles in forest protection activities? (Can you give some examples?)	
Q12.	Were women included in paid roles in the project activities?	
D: Recommendations		
Q13.	What in your opinion were the critical challenges and lessons learned from the project?	
Q14.	Are there any areas of the project that you feel could have been done in a better way?	

PUBLIC SECTOR KII GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
Q1.	Did the project respond to the real needs of the national reforestation strategy, environmental degradation strategy, and GHG emission reduction strategy?	Yes	No

Q1.1	If yes, what are these needs and how did the activities respond to them?		
Q2.	Did the project respond to the real needs of Forest Management and Protection, limiting environmental degradation and reducing GHG emissions?		
Q3.	If yes, what are these needs and how did the activities respond to them?		
Q4.	How has the project worked strengthened democratic governance of forests and resources in Lebanon?		
B: Effectiveness			
Q5.	How and to what extent did the LRI project complement your programs and activities in terms of reforestation, environmental degradation and GHG emission reduction?		
Q5.	In your opinion, what are LRI's headline outcomes and achievements in terms of reforestation, ecological restoration and GHG emission reduction?		
Q6.	To what extent did the project achieve its purpose and stated outcome to increase forest cover, improve reforestation techniques, restore degraded ecosystems, and reduce GHG emissions?		
Q6.1	What are the positive factors that influenced your cooperation with LRI?		
Q6.2	What are the negative factors that influenced your cooperation with LRI?		
Q7.	Has the project been effective in reforestation activities and other environmental issues?		
C: Sustainability			
Q8.	Are there prospects of sustainability for continued	Yes,	No

	cooperation between your institution and the LRI NGO?		
Q8.I	If Yes, what are these and how can you work on building on them or strengthening them?		
Q9.	Did the project address policy and advocacy with your institution?		
Q10.	If yes, what were the advocacy issues and policy recommendations identified?		
D: Gender			
Q9.	How do you understand the role of women in reforestation, forest management, and restoration of degraded land?		
D: Recommendations			
Q13.	What in your opinion were the critical challenges and lessons learned from the project?		
Q14.	Are there any areas of the project that you feel could have been done in a better way?		

DONOR KII GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance

Q1.	To what level is the project aligned with your reforestation strategy, environmental degradation strategy and GHG emission reduction strategy?		
Q2.	In your opinion, did the project respond to the real needs of Forest Management and Protection, limiting environmental degradation and reducing GHG emissions?	yes	no
Q3.	If yes, what are these needs and how did the activities respond to them?		
Q4.	In your opinion, how has the project strengthened democratic governance of forests and resources in Lebanon?		
B: Effectiveness			
Q5.	How and to what extent did the LRI project complement your programs and activities in terms of reforestation, environmental degradation, and GHG emission reduction?		
Q6.	In your opinion, what are LRI's headline outcomes and achievements in terms of reforestation, ecological restoration, and GHG emission reduction?		
Q6.1	What are the positive factors that influenced your cooperation with LRI?		
Q6.2	What are the negative factors that influenced your cooperation with LRI?		
Q7.	Has the project been effective in reforestation activities and other environmental issues?		
C: Sustainability			
Q8.	Are there prospects of sustainability for continued cooperation between your institution and the LRI NGO?	Yes,	No
Q8.1	If Yes, what are these and how can you work on building on them or strengthening them?		

Q9.	Did the project address policy and advocacy with your institution?		
Q10.	If yes, what were the advocacy issues and policy recommendations identified?		
D: Gender			
Q9.	How do you understand the role of women in reforestation, forest management, and restoration of degraded land?		
D: Recommendations			
Q13.	What in your opinion were the critical challenges and lessons learned from the project?		
Q14.	Are there any areas of the project that you feel could have been done in a better way?		

KEY EXPERT KII GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance		
Q1.	To what level is the project aligned with the National reforestation strategy, environmental degradation strategy, and GHG emission reduction strategy?	

Q2.	In your opinion, did the project respond to the real needs of Forest Management and Protection, limiting environmental degradation, and reducing GHG emissions?	Yes	No
Q3.	If yes, what are these needs and how did the activities respond to them?		
Q4.	In your opinion, how has the project strengthened democratic governance of forests and resources in Lebanon?		
B: Effectiveness			
Q5.	How and to what extent did the project add and disseminate knowledge in the field of reforestation, environmental degradation, and GHG emission reduction?		
Q6.	In your opinion, what are LRI's headline outcomes and achievements in terms of reforestation, ecological restoration, and GHG emission reduction?		
Q7.	Has the project been effective in reforestation activities and other environmental issues?		
C: Sustainability			
Q8.	Are there prospects of sustainability for LRI activities in Lebanon?	Yes,	No
Q8.I	If Yes, what are these and recommendations do you have on building on them or strengthening them?		
D: Gender			
Q9.	In your opinion do women have a role to play in knowledge and expertise in reforestation, forest management, and restoration of degraded land?		
D: Recommendations			
Q13.	What in your opinion were the critical challenges and lessons learned from the project?		

Q14.	Are there any areas of the project that you feel could have been done in a better way?	
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NURSERY KII GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
Q1.	Did the project respond to the real needs of your nursery through the activities you have been part of?	Yes	No
Q1.1	If yes, what are these needs and how did the activities respond to them?		
Q2.	What were the main activities that the nursery participated in and what was your level of involvement?		
B: Effectiveness			
Q5.	In your opinion, what are LRI's headline outcomes and achievements in terms of your nursery activities?		
Q6.	To what extent did the project achieve its purpose and stated outcome to build and transfer knowledge and expertise in the production and marketing of native-tree seedlings?		
Q6.1	What are the positive factors that influenced the ability to achieve the stated purposes?		

Q6.2	What are the negative factors that influenced the ability to achieve the stated purposes?		
Q7.	Has the nursery involvement been effective in producing high-quality seedlings and finding markets for native species?		
C: Sustainability			
Q8.	Are there prospects of sustainability for your nursery after the project ends?	Yes,	No
Q8.1	If Yes, what are these and how can you work on building on them or strengthening them?		
Q9.	What is the prospect of sustainability in the native-tree market?		
Q10.	What is the prospect of maintaining the quality of seedling production after the project ends?		
D: Gender			
Q11.	How do you understand the role of women in the nursery?		
Q10.	What were the difficulties of including women, if any? How were these solved?		
Q11.	Were women encouraged to take on leadership roles in nursery activities? (Can you give some examples?)		
Q12.	Were women included in paid roles in the project's activities?		
D: Recommendations			
Q13.	What in your opinion were the critical challenges and lessons learned from the project?		
Q14.	Are there any areas of the project that you feel could have been done in a better way?		

MUNICIPALITY MEMBER KII GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
Q1.	Did the project respond to the real needs of your municipality through the activities you have been part of?	Yes	No
Q1.1	If yes, what are these needs and how did the activities respond to them?		
Q2.	What were the main activities that your municipality participated in and what was your level of involvement?		
Q3.	How has the project worked towards a strengthened civil society in your municipality, contributing effectively to participatory and democratic governance?		
B: Effectiveness			
Q5.	In your opinion, what are LRI's headline outcomes and achievements in terms of municipality project activities?		
Q6.	To what extent did the project achieve its purpose and stated outcome to build stability and create social harmony?		
Q6.1	What are the positive factors that influenced the ability to achieve the stated purposes?		

Q6.2	What are the negative factors that influenced the ability to achieve the stated purposes?		
Q7.	Has the project been effective in expanding and protecting the area of planted trees and other environmental actions in your municipality?		
C: Sustainability			
Q8.	Are there prospects of sustainability for the work you have done under the municipality after the project ends?	Yes,	No
Q8.1	If Yes, what are these and how can you work on building on them or strengthening them?		
D: Gender			
Q9.	How do you understand the role of women in the project?		
Q10.	What were the difficulties of their inclusion? How were these solved?		
Q11.	Were women encouraged to take on leadership roles in local forest area management? (Can you give some examples?)		
Q12.	Were women included in paid roles in the project's activities?		
D: Recommendations			
Q13.	What in your opinion were the critical challenges and lessons learned from the project?		
Q14.	Are there any areas of the project that you feel could have been done in a better way?		

NGO KII GUIDE

Name of Facilitator	
Name of Note Taker	

Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
Q1.	To what level is the project aligned with your action plan?		
Q2.	In your opinion, did the project respond to NGO needs in reforestation and forest management issues?	yes	no
Q3.	If yes, what are these needs and how did the activities respond to them?		
Q4.	In your opinion, how has the project strengthened cooperation between NGOs with similar objectives in Lebanon?		
B: Effectiveness			
Q5.	How and to what extent did the LRI project compliment your programs and activities in terms of reforestation, environmental degradation, and GHG emission reduction?		
Q6.	In your opinion, what are LRI's headline outcomes and achievements in terms of reforestation, ecological restoration, and GHG emission reduction?		
Q6.1	What are the positive factors that influenced your cooperation with LRI?		
Q6.2	What are the negative factors that influenced your cooperation with LRI?		

Q7.	Has the project been effective in reforestation activities and other environmental issues?		
C: Sustainability			
Q8.	Are there prospects of sustainability for continued cooperation between your institution and the LRI NGO?	Yes,	No
Q8.I	If Yes, what are these and how can you work on building on them or strengthening them?		
Q9.	Did the project address policy and advocacy with your institution?		
Q10.	If yes, what were the advocacy issues and policy recommendations identified?		
D: Gender			
Q9.	How do you understand the role of women in reforestation, forest management, and restoration of degraded land?		
D: Recommendations			
Q13.	What in your opinion were the critical challenges and lessons learned from the project?		
Q14.	Are there any areas of the project that you feel could have been done in a better way?		

COMMUNITY MEMBERS (WORKERS, FOREST GUARDS ETC.) KII GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	

Attached List of Participants + Contact + Gender

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
Q1.	What are the needs that your position responds to in terms of forest management and protection?		
Q2.	What were the main activities that you participated in and what was your level of involvement?		
B: Effectiveness			
Q5.	In your opinion, what are LRI's headline outcomes and achievements in terms of protecting forests and planted sites?		
Q6.	To what extent did the project achieve its purpose and stated outcome to protect forests and planted sites?		
Q7.	Has your involvement been effective in protecting forests and planted sites?		
C: Sustainability			
Q8.	Are there prospects of sustainability for your involvement after the project ends?	Yes,	No
Q8.I	If Yes, what are these and how can you work on building on them or strengthening them?		
Q9.	What is the prospect of sustainability for forest and planted site protection and expansion?		
D: Gender			
Q11.	How do you understand the role of women in forest protection and expansion?		

Q10.	What were the difficulties of including women, if any? How were these solved?	
Q11.	Were women encouraged to take on leadership roles in forest protection activities? (Can you give some examples?)	
Q12.	Were women included in paid roles in the project's activities?	
D: Recommendations		
Q13.	What in your opinion were the critical challenges and lessons learned from the project?	
Q14.	Are there any areas of the project that you feel could have been done in a better way?	

PRIVATE SECTOR KII GUIDE

Name of Facilitator	
Name of Note Taker	
Name of the Focus Group	
Location of the Focus Group	
Date of the Focus Group	
Attached List of Participants + Contact + Gender	

After introducing the team and the purpose of the FGD as part of the LRI final evaluation, the following questions will be asked:

A: Relevance			
Q1.	Did the project respond to the real needs of your company's CSR strategy?	Yes	No
Q1.1	If yes, what are these needs and how did the activities respond to them?		
B: Effectiveness			
Q5.	How and to what extent did the LRI project complement your CSR strategy?		

Q5.	In your opinion, what are LRI's headline outcomes and achievements in terms of complementing your CSR strategy?		
Q6.	To what extent did the project achieve its purpose and stated outcome to complement your CSR strategy?		
Q6.1	What are the positive factors that influenced your cooperation with LRI?		
Q6.2	What are the negative factors that influenced your cooperation with LRI?		
Q7.	Has the project been effective in its engagement with your company? If so, how?		
C: Sustainability			
Q8.	Are there prospects of sustainability for continued cooperation between your company and the LRI NGO?	Yes,	No
Q8.1	If Yes, what are these and how can you work on building on them or strengthening them?		
D: Gender			
Q9.	How do you understand the role of women in communities benefitting from your CSR activities related to reforestation?		
D: Recommendations			
Q13.	What in your opinion were the critical challenges and lessons learned from the project?		
Q14.	Are there any areas of the project that you feel could have been done in a better way?		

ANNEX 9: DATA SOURCE MATRIX

Area of Evaluation	Main Question	Sub-Questions	Data sources	Data collection methods, sample, and tools	Data analysis plan
Relevance	To what extent are the LRI activity and the technical assistance provided under it, relevant to the needs of people in rural communities in terms of building social stability and improving the sustainable management of resources?	- To what extent are the activity's goals, purpose, and objectives/results aligned to support the country's national reforestation strategy and the USAID CDCS? - To what extent did LRI conduct activities in line with their approved work plan (de jure vs de facto)? (Where they able to do what they set out to do?) a) - To what extent did the activity's technical assistance answer and/or address the real needs within the intervention areas?	- LRI's Staff and technical experts - Key stakeholders at USAID - Activity Documents and M&E Plan - National Reforestation Strategy - National Plans for Social Stability - LRI phase I evaluation	- Key Informant Interviews (KIIs) with staff, technical experts, and USAID stakeholders - Desk review of activity documents	- Qualitative data analysis of KIIs
Effectiveness	How and to what extent has the activity achieved planned results in terms of: reversing environmental degradation by reforesting grasslands, shrublands, and areas burned by wildfires; engaging the community to protect its environment; and	- What are LRI's headline outcomes and achievements? How have these been documented and analyzed? - To what extent has the activity achieved its outcomes and stated purposes? - What are the main factors that positively or negatively influenced LRI's ability to achieve these purposes? - What impact did LRI have on the reforestation sector specifically through:	- LRI's Staff and technical experts - Key stakeholders at USAID - Native-tree nurseries, municipalities, and NGOs - Activity Documents and M&E Plan - Implementation sites - National Reforestation Strategy - Activity documents	- Key Informant Interviews (KIIs) with staff, technical experts, and USAID stakeholders - FGD or group interview with the representatives of the native-tree nurseries, NGOs, and Municipalities based on an interview guide or questionnaire. - Desk review of activity documents - Direct observation guide/Checklist for field visits	- Qualitative data analysis of the KII and group interviews and Quantitative analysis of the activity's reported data/indicators, then Comparison with the results from the field visits

	engaging the private sector through native tree nurseries and support for out-planting?	• Reversing environmental degradation by reforesting grasslands, shrublands, and areas burned by wildfires; • Community engagement to protect the community environment; • Private sector engagement through native tree nurseries, and private sector support for out-planting; • NGO engagement in native tree nurseries • Advanced planting techniques, resulting cost/benefit, and out-planted seedling survival on reforestation? - What evidence is there that social stability has improved as a result of reforestation projects in identified communities? - Which aspects of the program were relatively more or relatively less cost effective toward achieving the activity goal? - How effective were LRI's outreach and communication? How was the publicity generated for USAID and the broader Embassy by the activity? ○	- Lebanese experts in reforestation - Ministry officials - Beneficiaries - Municipal officials and residents of areas targeted in Phase II (Mod 6) - Interview with LRI component managers for community engagement - Opinion leaders in the planted areas.	- Documents collected from the IP. Comparing LRI reforestation with other reforestation sites (e.g., seedling survivability rates...) - Assess awareness of LRI initiative in the Ministry and municipalities - Most Significant Change (MSC) with staff and others interviewed - Questionnaire or interview guide - Identify specific sets of stakeholders: municipal officials, nursery owners, local organizations that look after the forest, ... - Rapid field survey and KIs asking awareness questions of women participants - Crowd source at municipalities	- Qualitative analysis and narrative report of the results.
Gender	Did LRI create/enhance more active environmental awareness?	○ - Did women actively participate in local decision making, e.g. in the municipal environment committees? ○ - Were women encouraged to take on leadership roles in local forest area management?	- Females participating in the activity. Women in the community. Women on the committees. - Representatives of Women NGOs in the planted areas.	- Rapid field survey and KIs asking awareness questions to women participants	- Qualitative analysis and narrative report of the results.

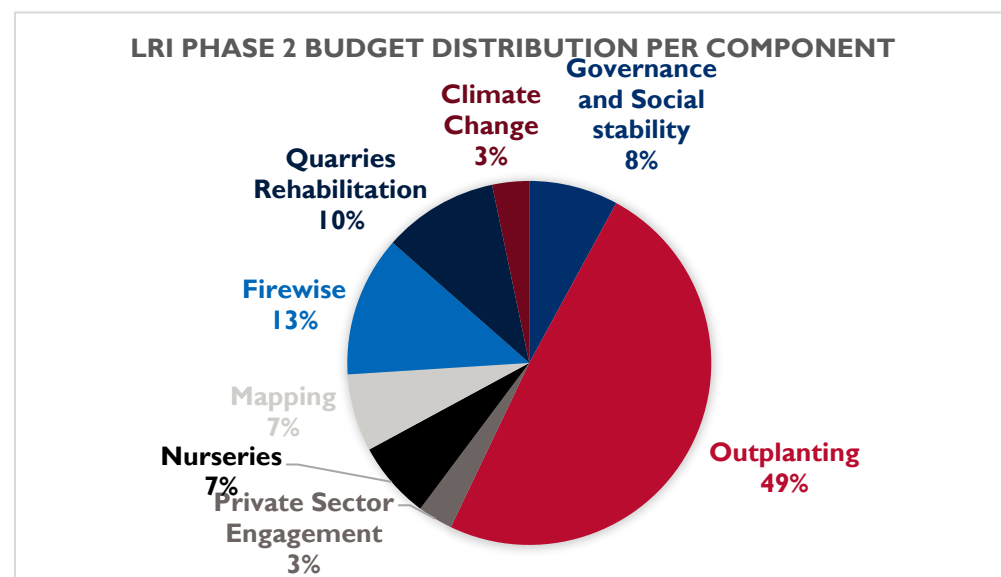
			- Opinion leaders in the planted areas.		
Sustainability	What is the likelihood that the results LRI has achieved are sustainable beyond the life of the activity?	- How sustainable are LRI's activity results likely to be in the medium to longer term? - Which results show the most prospect of being sustained and why? - To what extent has the sustainable management of natural resources in Lebanon been developed? - How sustainable are the permanent jobs created by the activity? What is the benefit of the short-term seasonal jobs that LRI has produced? - Which aspects of LRI's activities are or are likely to be the most scalable? (i.e. – Replicable at a declining marginal cost as uptake increases). -What aspects of the program demonstrate women's sustainable participation beyond the life of the activity?	- Representatives of Municipalities, participating NGOs, and Ministries of Environment and Agriculture. - Activity documents. -LRI's Staff and technical experts - Key stakeholders at USAID	- KIs and support documents provided by the key informants. - Have stakeholders describe the sustainability scenario (prospects and how to improve prospects) then use qualitative methods to unpack common themes. - Review any financial audits of reforestation sites. - Secondary data (e.g. information from assessments of similar projects in the country or region to understand how sustainable they have become)	- Qualitative data analysis of the KIs and Quantitative analysis of the activity's indicators
Recommendations & Future	What recommendations does USAID need to consider for future programming?	- What were the critical challenges and lessons learned from this program? -Provide recommendations on how the activity design could be enhanced to improve the sustainability of results, and suggest additional programming or support in the upcoming years that would improve LRI's results sustainability (e.g., What is the outlook for sustaining the Cooperative of Native Tree Nurseries in Lebanon?).			

		-What is the best way for USAID to tweak future programs in a way that fits both environmental and social goals? - Offer recommendations to build on the adopted approach to increase women's participation in similar activities in the future.			
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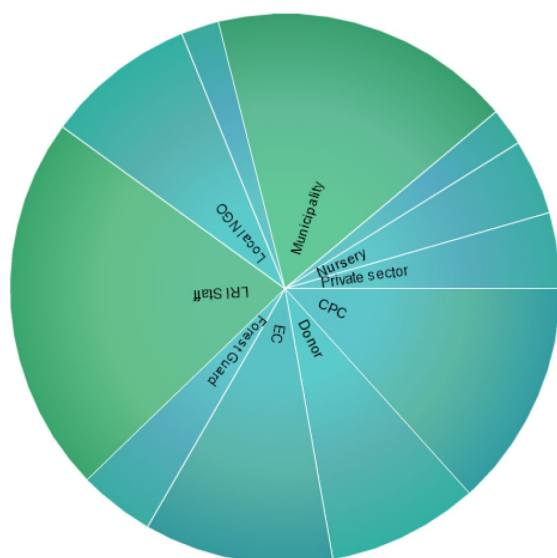
ANNEX 10: DATA ANALYSIS

Table 5: Cost-effectiveness

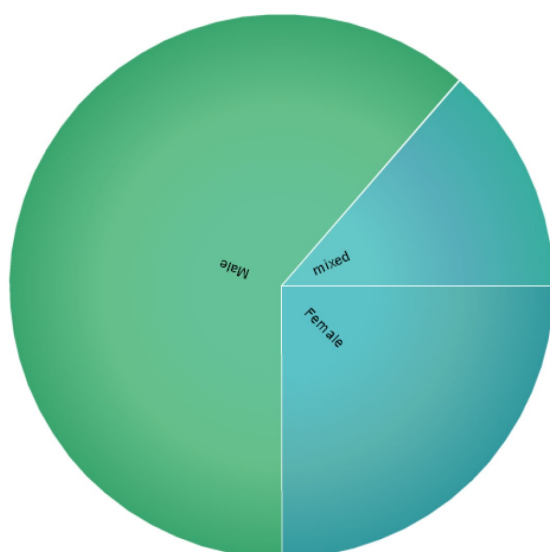
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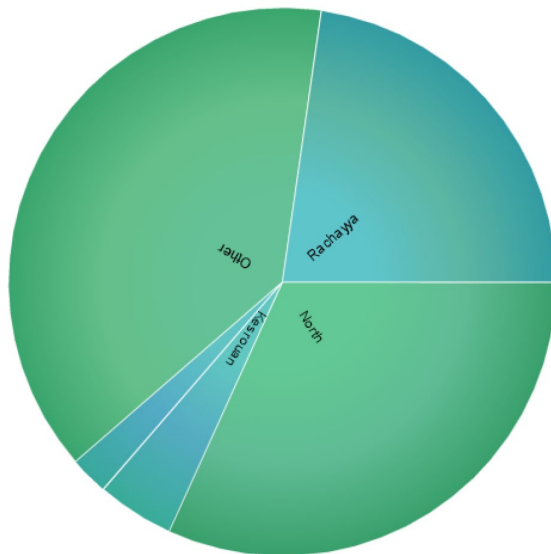
Graphic I Division of interviewees per category



Graphic 2 Division of interviews by gender



Graphic 3 Frequency of interviews per area



ANNEX I I: FOCUS GROUP DISCUSSION SUMMARIES

[Redacted]

ANNEX 12: CONFLICT OF INTEREST DISCLOSURES

[Redacted]

ANNEX 13: EVALUATION TEAM MEMBERS

- 1) **Evaluation team leader (expatriate):** Robert Primmer holds a Master's degree in Environmental Law and Management. He has experience in community engagement and natural resource management and knowledge of social forestry concepts and programs in developing countries. His qualifications combine expertise in natural resource management with inter-community relations, stability, and development. He has good knowledge of USAID regulations related to evaluation of projects. He has 22 years of experience in the design and implementation of foreign assistance programs. He is EQUI-certified.
- 2) **Sustainability and cost effectiveness expert (local evaluator):** Jad Abou Arrage, PhD, holds a Master's degree in development sciences and a PhD in Agriculture and Environmental Sciences. He has 12 years of experience with more than 15 international and local organizations. He works as an independent consultant on project management and evaluation in the fields of rural and agricultural development, environmental resources management, ecotourism, and rural tourism. Since 2014 he has been an assistant professor at the Lebanese University and teaches environmental economics, landscape management, and ecotourism.
- 3) **Social stability expert (local evaluator):** Bilal Al Ayoubi holds a Master's in Business Administration and a Bachelor of Economics with distinction from the Lebanese American University (LAU) in Beirut. He also holds a certificate in NGO Management from The School of Oriental and African Studies (SOAS) - University of London. Bilal's 11 years of experience are mainly on post-conflict recovery projects, including work on youth engagement, conflict prevention, and response to the Syrian refugee crisis and the burdens it created for Lebanese host communities. His expertise evolved through working primarily in Lebanon as well as in Yemen and Libya. He currently works as a consultant and researcher mainly on social stability and conflict analysis assignments with USAID, UNDP, and other international organizations.
- 4) **PMSPL II staff** works alongside the technical expert/evaluator and forms part of the evaluation team. Social Impact HO has budgetary provision for additional technical evaluation support that might be needed. PMSPL II's resident staff and HO staff participate in drafting, reviewing, and editing the final report draft before circulating it to the stakeholders for comment and review. The preparation of the evaluation report is the responsibility of the team leader/technical expert. Social Impact handles the final editorial and quality control tasks.

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