CEPF Final Completion and Impact Report

Organization's Legal Name:	The Friends of Nature
Project Title:	Conservation of Lebanon Endemic Flora Through Community Engagement
Grant Number:	CEPF-108784
Hotspot:	Mediterranean Basin II
Strategic Direction:	4 Strengthen the engagement of civil society to support the conservation of plants that are critically endangered or have highly restricted ranges
Grant Amount:	$173,175.00
Project Dates:	November 01, 2018 - September 30, 2021
Date of Report:	January 20, 2022

IMPLEMENTATION PARTNERS

- We coordinated with USJ on some activities: Anthony Roukoz participated twice with us on Cyclamen libanoticum counting in JMBR. We monitored Cyclamen sites for seed collection and informed team of the University of Saint Joseph (USJ) of the best site and time for seed collection. We provided the seeds we had collected for Salvia peyronii to support the germination experiments of USJ. We provided USJ with field data on the target species in the Jabal Moussa Biosphere Reserve (JMBR) and Horsh Ehden Nature Reserve (HENR). The problems that the country faced over the past three years since October 2019 did not allow for smooth coordination, particularly that our schedules did not match; FON had more flexibility to continue field activity even under COVID-19 outbreak surely committing to safety and enacted regulation measures. We tried to collaborate as much as the situation permitted.
- For JMBR, we coordinated regularly with Association for the Protection of Jabal Moussa (APJM) on the field visits to investigate the different species; we also informed the guards prior to taking the survey days for monitoring and safety purposes. We relayed information on the field discoveries to the appointed coordinator, Ms Barakat then Ms Mezher. We also sent direct information from the field to the coordinators on important sightings of herdsmen or naturally germinating saplings to collect, or other. APJM team was fairly engaged in the progress of the project and the field work, and we took their feedback into consideration; we held several meetings with APJM management at their offices to exchange and discuss the different aspects of the project.

CONSERVATION IMPACTS

Planned Long-Term Impacts: 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
4 communities botanically empowered to address flora, endemics and SREs and recognize the value of their floral inheritance and natural heritage.	The four communities were empowered through a set of tools that consolidate their interest and strengthen their engagement at acknowledging their natural heritage. a) The communities were botanically trained to profoundly comprehend the identity of species through the defining characters and characteristics in order to start differentiating and recognizing the plant diversity; b) they were introduced to the value of the floral heritage in endemic, rare and SRE; c) site visits were employed to support plant identification in the field and to comprehend the characteristics and significance of habitats and microhabitats; d) visits to protected areas was used to introduce the value of conservation and the different conservation modules. As a result, the four target communities are now botanically responsive, supportive of the protection of their natural heritage, and capable to augment their participation in nature based activities and proposals.
At least, 2 communities start to develop a form of nature conservation, most probably micro-reserves, as a result of activities on this project on the dedicated sites of the KBAs.	2 communities, Bcharri village by Mount Makmel and Kfarselwan village by Mount Kneisseh, became committed to nature conservation as a result of the activities and capacity building on the project. These communities have regulatory mandates and communal rights over the target nature ranges. In addition to these main communities, nearing villages were also engaged, such as villages Hasroun and Bazoun by Bcharri, and villages Kneisseh and Jouar el Haouz by Kfarselwan. In both communities, grassroot support for the protection of natural riches and landscape against existing and potential threats is highly strengthened and activated. Communal endorsement of nature conservation of the target sites of KBAs is now well founded on scientific and opportunity bases. At the local authority level, the municipality of Bcharri is supportive of labelling site protection under a plan that would not contradict the use of nearing areas for ski activities; we modified our initial proposal accordingly, suggesting a complex of 3 protection modules. Regarding the municipality of Kfarselwan, we discovered that the mountain was leased for development for a period of 40 years; we are working on enforcing protection from threats, and proper management of natural assets.

Impact Description	Impact Summary
Conservation status of 13 endemic species is improved with populations stable and increasing.	The current conservation status of 13 endemic species is verified based on field survey. This is an important achievement since most species were not reviewed in their habitats for over 50 years. Results are alarming to the state of most of the treated endemics. One species was not found in its main natural habitat as stated in literature. This raises exclamations on its survival; efforts are needed on national scale to contemplate the current status of the species prior to declaration of local and global extinction. Another was not found at its literature cited location, but we discovered it at one of the investigated sites. 3 species are still surviving, but in low population size; 2 of which are red-listed as CR and 1 as EN. 8 species are in a stable state at the studied sites, knowing that 3 of them are red-listed as EN and 1 as CR. Uncovering the current state of the endemic species is a keystone for any effective conservation actions, national policies and decision making. Based on project findings, management plans were prepared to help stabilize and increase the populations of the species found in the reserves. Conservation plans were developed for local authorities to act toward proper protection of the species & the significant habitats.
At international scale, information about the taxonomic /conservation status and distribution of these CR and SER plants documented (as many of them are unrecognized currently)	13 SREs are supported with proven estimation of extant population size, population distribution, definition of habitat and microhabitat preferences and habitat limitations. In summary, ☐ EN Allium sannineum, was not found at one of its 3 main locations, which raises concerns to the fate of the species. Although the loss of this habitat would reflect on the red-list status, similar habitats across Mount Lebanon must be investigated prior to modifying red-list status. ☐ 3 species are CR due to low population size & small area of occurrence. One of these is found at JMBR; management plan was prepared to support better in-situ conservation. 2 species are located outside PA; protection plans were prepared with the support of local community and are followed up with local authorities. ☐ 8 species were treated for the first time, now their conservation status is verified and can be better monitored to ensure better species survival. 4 are red-listed as EN; they are distributed in reserves.

Impact Description	Impact Summary
	☐ 1 species was discovered outside its known habitat where it was not found. National survey is needed to determine its status. In addition, close monitoring of populations and habitat of the CR Iris cedreti is undertaken with the assistance of local community.
Integration of new data gathered on plants into national policies and development plans to help mitigate any threats to these plants	☐ The project showcases 2 examples of collaboration with local authorities to overcome impediments toward protection of natural heritage and particular species; these impediments are induced by situations of conflict stemming from development approaches. We have well progressed to present prototypes of ways and means to integrate conservation and development. ☐ The project integrates with the proposal of the Ministry of Environment (MoE) to develop a national management plan for the heights of Lebanon. It presents a study and conservation prospect for two sites within the range of heights of Lebanon, namely Mount Makmel and Mount Kneisseh. ☐ At mitigating threats, unprotected Makmel and Kneisseh now benefit, under acting laws, from the prohibition of any urban development or activities that change the nature of the sites due to the verification of the occurrence of SRE and CR species. ☐ Project results featured in the national report "Lebanon State of the Environment- SOER 2020" endorsed by the MoE and UNDP. The report documents national advances on biodiversity,& aligns with international treaties. ☐ Project results support the National Biodiversity Strategy and Action Plan (NBSAP) with more research, data and management plans for sensitive habitats and endemic/CR/EN speci

Planned Short-Term Impacts: 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
Capacity of PAs managers (Jabal Moussa and Ehden reserves) strengthened with botanical skills, knowledge of PA endemics, potential threats and proper conservation activities to help integrate plant conservation into the reserves' management plans	Trainings of the Association of the Protection of Jabal Moussa (APJM) addressed the reserve team without the engagement of local community members. ☐ 3 PA Managers (2 females, 1 male) have received the training. ☐ 2 permanent staff members (1 female, 1 male) and 6 guides and guards (4 females, 2 males) also received the training. Accordingly, all the management team of APJM followed the training. With respect to the team of

Impact Description	Impact Summary
	guides, which numbers about 18 members, they provide services on basis of availability; the most frequently available guides followed the trainings. At Horsh Ehden Nature Reserve (HENR), the training was delivered to the management team and supporting local community members. ☐ The PA manager and the manager of the reforestation activities followed the training (2 females). ☐ 2 staff (females) and 3 guides (1 female, 2 males) followed the training. In that, all the management team of HENR received training. The intensive training focused on acquiring botanical skills, appreciating local endemics, their significance, and that of the ecosystem, and identifying SREs and threats onsite. PA managers were also supported with management plans to facilitate their operations. FON will also continue to provide consultation and support.
2 protected areas of 7000 ha, namely Jabal Moussa Biosphere Reserve and Ehden Forest Nature Reserve, benefit from management plans focused on conservation of endemic flora.	Management plans were prepared and presented to the reserve management teams with focus on the endemic species. All information pertinent to the species were also presented to the reserve, especially to direct future actions in line with the requirements of these species, and to avoid triggering any disturbance pressures in the habitats of the species and on their populations that are now located and mapped. The management plans were adopted into the management plans of the reserves for implementation. ☐ The management plan of the Horsh Ehden Nature Reserve now integrates management and conservation actions for 3 EN endemic species, in addition to other general recommendations for management of the floral base. ☐ Horsh Ehden Nature Reserve also implemented management actions to improve the protection of the EN SRE Astragalus ehdenensis, which is of low population size; members of the species found on trails were fenced against trampling and breaking of branches and flowers by passing visitors. ☐ The Jabal Moussa Biosphere Reserve now has management plan for better conservation of 4 of its endemics, including 1 EN and 1 CR, in addition to other general recommendations for management of the floral base.
4 young professionals of Friends of Nature empowered with botanical, conservation and	7 young professionals (5 females, 2 males) were empowered with advanced knowledge on endemism,

Impact Description	Impact Summary
management knowledge and practical skills for conservation implementation with PA and communities.	conservation and management in addition to practical skills for species identification and habitat review. The team helped at testing the impact of the training material addressed to communities; their recommendations were considered. The team took part at preparing and assessing the training pre- and post-evaluation forms. They participated on project activities, especially species surveys. The team was composed of fresh graduates of agriculture engineers or science degree holders with engagement in biodiversity. The training helped them define their career options, and enabled their capacities to serve a conservation job or assignment. They received training certificate. Some got employed at NGOs, and two ladies are following higher education abroad. FON always provides supporting recommendations.
Three KBAs, with nearly 7500 ha, acquire strengthened protection and management with focus on plant conservation: Sannine-Rihane slopes and heights, Mount Makmel and upper Kadisha valley, and Keserwan-Jabal Moussa	Broad explorations of vast terrain were primarily conducted to narrow down the zones of the target species; thus in the largely investigated 7000ha of KBAs, 3560 ha were intensively surveyed to determine the state and distribution of the target species. In Sannine-Rihane slopes and heights KBA, about 1500 ha were screened; 460 ha of Mount Kneisseh are associated with the CR-SRE. The latter received a plant conservation plan that is being progressed to implementation with the local municipality. In Keserwan-Jabal Moussa KBA, 1330 ha of JMBR were thoroughly surveyed and mapped for the target SRE; management plans were defined accordingly to support intensified species protection. In Mount Makmel and upper Kadisha valley KBA, nearly 2500 ha of Mount Makmel were largely explored; the target species are concentrated in 1250 ha. A conservation plan tailored to the protection of the species is presented to the Municipality of Bcharri for endorsement. Again in Mount Makmel and upper Kadisha valley KBA, 520 ha of 3000ha of HENR were extensively surveyed; the area is dictated by the nature of the target species which are shade tolerant and confined to the densely forested area. A management plan for strengthened species protection is set into implementation.

Unexpected impacts (positive or negative)?

- Community Engagement

The very positive impact that the trainings generated in all communities was truly surprising. We have always conducted capacity building and trainings of communities and

we know how to deliver the message and generate an impact. However, the scope of training here was very scientifically based and specific. It was not expected that local community will be that impressed by simplified botanical knowledge and find in detailed information a pleasure to explore further. We are pleased to have allowed for this impact and not underestimated the potential and capacity of local communities to engage to this dimension of plant diversity. We are also happy to learn of this impact in order to broaden the spectrum of training and replicate with other communities.

Associating conservation training with visiting a representative module of conservation was a very successful approach. It allowed a tangible feel of conservation, especially when the visitors compared the state of sites, plants and biodiversity between degraded regions that they came from and the effect of conservation at restoring the beauty and the potentials of the nature sites. This facilitated the adoption of conservation as a development measure to improve and generate benefits to communities rather than just protecting plants for the value of plants. Visitors sensed the range of activities that would be favored through conservation and embraced the significance.

The impact of the trainings was profoundly rooted that interviewing the trainees after nearly a year provided a feedback as mature and as impressive as the moment of training, and we discovered that many trainees were exploring the field of biodiversity for a future career or a vocation.

- Species Exploration
Species explorations also provided some surprises. The four sites selected for exploring SRE present a particular significance at defining the natural wealth of Lebanon, and underlying evolutionary potentials. They manifest a high level of species diversification, and confinement of habitat conditions promoting recognition of ecosystem, habitat and microhabitat diversity.

The results of this project assert the significance of Lebanon as an archetypal reference to the capacity of high diversification and differentiative evolutionary pressures within a small geographical area centered on distinctive microhabitats inspired by topographic diversity on small scale. For Lebanon, microhabitat diversity is more decisive at defining its biodiversity than habitat diversity.

Project results also emphasize the significance of the forests of Lebanon as a key factor at supporting critical biodiversity; forest cover is proving to be a determining factor in the distribution, expansion and survival of significant species.

- COVID-19 and Socio-political situation
The unexpected COVID-19 outbreak associated with socio-political instability followed by an economic and financial collapse inevitably laid their impact on the progress and timely completion of project envisaged activities. Extending project duration and support helped to recover on project progress and outputs particularly in field work and community engagement. However, the performance of the authorities, local and central, was gravely impaired with successive delays, absences and postponements; unfortunately, the official declaration of conservation of the unprotected sites was not attained though we hoped for that, FON will continue to follow up on the process.

PROJECT RESULTS/DELIVERABLES

Overall results of the project:

1. At the level of SRE plants, primary concrete data is established for 13 SRE distributed at four sites of Lebanon in 3 KBAs through field surveys.

☐ Total population size was determined
☐ Number of populations of species at sites was uncovered
☐ Species distribution maps were produced
☐ Reproductive capacity and seed set was determined
☐ Natural regeneration capacity was highlighted
☐ Ecological preference was described
☐ Threats to species were outlined
☐ The project presents a module for the assessment of the state of threatened endemic species in their natural habitats.
☐ Project results constitute baseline data for the target species. It is highly significant to assess the state of the species in their natural habitats and to discern their distribution in order to advise appropriate management and conservation measures, especially that the studied species do not observe homogeneous distribution over their natural terrain.
☐ The baseline data is imperative for the monitoring of the state of the species over time, to truly infer whether populations are increasing, decreasing or stable, whether they are recruiting new members or old members are deteriorating.

2. At the level of community engagement and capacity building,

☐ A botanical training module targeting communities was developed, and will serve for further trainings.
☐ A manual on plant life cycle and diversity was prepared and distributed to participants.
☐ A manual on plant identifying botanical characters was prepared, utilized for field training, and distributed to participants.
☐ Species identifying sheets were prepared for the target SRE and distributed to trainees
☐ 4 communities in 3 KBAs are made aware of the significance of their natural heritage in general, and the importance of the SRE in their regions in particular. The communities are not limited to the single main villages; nearing villages in the regions of Bcharri, Ehden, Jabal Moussa and Kfarselwan participated in project activities, which expanded the outreach and impact.
☐ 99 community members received structured training on the botanical field and the identifying characteristics of plants to enlarge their scope of comprehension of the plant world; this was very enlightening to help them recognize the value of plant diversity, and the identity of plant species, which they previously considered collectively as 'plants'.
☐ 99 community members can identify the valuable SRE in their natural regions
☐ 99 community members are capable of providing constructive support for field work and research in the KBAs.
☐ 99 members recognize the value of species and habitat conservation and are aware of different conservation modules.
☐ Women engagement in biodiversity recognition and conservation is greatly enhanced with 67% of trainees being females.
☐ 2 communities of unprotected sites networked with nearing protected areas to consolidate their engagement in conservation of their sites.
☐ 5 PA managers of two PA are better enabled to conduct their responsibilities through enhanced background information of plant diversity and their sites, and through evidence-based data on the sensitive species in their reserves.

3- At the level of enhancing the conservation and management of the SRE,

☐ 2 protected areas, HENR and JMBR, are supported with species distribution maps which are fundamentally useful for the management teams to avoid conceiving activities in species habitats.
☐ 2 protected areas received management plans to improve the protection of the SRE. The management plans are adopted into the management plan of the reserves for implementation.
• management practices for the better protection of 1 species, Astragalus ehdenensis were undertaken at HENR to reduce the existing threats. 2 unprotected sites received conservation plans integrating the results of field surveys, and the uncovered population distribution and habitat characteristics of the species.
☐ The major threat of grazing was resolved for Mount Kneisseh. Herdsmen of Kfarselwan were engaged to spare the site from grazing; they affirmed their support for the protection of the communal heritage. This integrally facilitates the work of the municipality and reduces conflicts.
☐ Youth engagement at Mount Kneisseh materialized in cleaning up campaign, collecting garbage and eliminating campfires. The undertaken action symbolizes a change in behavior and the support of youth for protection of the site.

4- At the level of decision making,
• It is nationally enhanced with the verification of the survival of populations of EN & CR species in the 2 unprotected areas. Future EIAs of any development project are now obliged to favor preservation over exploitation threats by virtue of acting laws of EIAs.
• 2 local authorities are more knowledgeable of the significant natural heritage under their mandate, and are more sensitive to conservation of important species.
• 2 local authorities are supported with evidence and conservation/protection plans
• 2 local authorities launched the decision taking process for site conservation
a) For Mount Makmel, a preliminary conservation plan was submitted to the municipality of Bcharri to support the declaration of the surveyed zone as a nature reserve. The municipality stated concerns regarding access to some slopes that are planned to become ski platforms in the future. The conservation plan was modified to address these concerns; a conservation complex of three zones was proposed: a micro-reserve zone for Senecio blanchei, a micro-reserve for Myopordon pulchellum and a nature reserve on the internal zone, while leaving the dirt road between the reserves with access to the slopes free for the use of the municipality. The head of the municipality, Mr. Freddy Keirouz, promised to present the plan to the municipal council and provide their approval, prior to processing the proposal with the Ministry of Environment
b) As to the protection of Mount Kneisseh, the municipality supports protection of the site, and participated in the site visit acknowledging the location and state of the species. The municipality uncovered an agreement made 10 years ago; the agreement leased the heights of Kneisseh to a company for the development of a ski resort and platforms. The municipality divulged that the project received an Environmental Impact Assessment and was approved by the Ministry of Environment. Any EIA lasts for two years and needs to be renewed if not used; the verified occurrence of the CR Hieracium kneissaeum on Mount Kneisseh will oblige future EIAs to support protection of the site especially that the site is a public domain and the communal land of Kfarselwan village. The municipality is advancing site management and protection measures with our consultation.

5- Fauna exploration assert the significance of conservation of the unprotected sites,
• The EN Kulzer Lizard endemic of the Levant was recorded at Mount Kneisseh, and reproducing.
• Important discovery of the EN endemic Lebanese Thin-Toed Gecko was made at Mount Kneisseh.
• The EN Lebanon endemic Fraas's lizard was recorded on Mount Makmel.

6- For project outreach, a video documentary was produced showcasing activities, results, sites, and impact. The documentary makes a valuable reference to spread knowledge on the SREs and conservation. It is posted on YouTube and has been diffused to a large number of viewers on social media.

7- Traditional knowledge and habits of the use of wild plants by rural community Kfarselwan were documented for the first time, uncovering important native practices on rangeland organization, wild forage species, as well as beneficial species utilized locally for food, hot drink

Results for each deliverable:

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
7.0	Empowering the Association for the Protection of Jabal Moussa (APJM) for awareness building on Jabal Moussa floral diversity and conservation	7.1	Report and photos of developed onsite awareness tools	On-site awareness tools were developed and used on all trainings. Reference manual was also produced in English and Arabic for participants, copy attached.
7.0	Empowering the Association for the Protection of Jabal Moussa (APJM) for awareness building on Jabal Moussa floral diversity and conservation	7.2	Report and photos of development of outreaching awareness tools	Outreaching awareness material was developed and diffused electronically rather than printed due to the lockdowns and social distancing experienced since COVID-19. The reference manual for trainees is attached.
5.0	Improved Plant Conservation of Jabal Moussa Biosphere Reserve in Keserwan-Jabal Mousa KBA	5.4	METTs filled up for Jabal Moussa Reserve, at beginning and end of the project.	METT forms were filled at the beginning and end of the project. They were submitted on the portal, good progress is reported between the two versions. The end of project METT is attached.
1.0	Capacity building of botanical and conservation skills of Friends of Nature team	1.2	CSTT and GTT produced at beginning and end of project	Both tracking tools were produced at beginning and end of project; they show improvement in resulting scores due to the advancement that FON engendered on all its activities and internal procedures, policies and other.
1.0	Capacity building of botanical and conservation skills of Friends of Nature team	1.1	Attendance list and pictures attest the training of 4 members of Friends of	7 FON members were trained were trained and participated in the building of several project activities. Training of FON team is

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
			Nature to botanical and conservation concepts	presented in the attached FON Capacity Building report.
2.0	Improved Conservation of SRE in Kneisseh summit of Sannine-Rihane slopes and heights KBA	2.1	Lists of meetings and brief minutes verify sensitization of at least 10 influential stakeholders in the Kfarselwan, Juar el Hawz and Kneisseh villages to the value of the KBA and significance of conservation of their endemics.	Influential stakeholders were individually met and the municipality grouped all influential figures of the region into a meeting at the municipality to acquaint them with the project and the value of the KBA and its significance. Information and photos are presented in the attached Kneisseh Community report.
2.0	Improved Conservation of SRE in Kneisseh summit of Sannine-Rihane slopes and heights KBA	2.2	Attendance list and pictures of training workshop for 5 stakeholders and institutional members on botanical skills	In the region of Mount Kneisseh, collaboration with the municipality and the Women Association of Kfarselwan (WAK) supported the training of 35 participants (77% females) including: members of the municipality, the WAK members, members of the community and youth. The community became very attached to their natural heritage on Mount Kneisseh; they had never realized its value or the meaning of endemism. When associated with a visit to the JMBR as a module of conservation, the value of conservation of the natural heritage became more tangible and more appreciated. The ladies of WAK became more convinced of the protection of Mount Kneisseh and adopted ecotourism as a method to employ the heritage for the benefit of the local community in a sustainable development approach. The community was very zealous to visit Mount Kneisseh and get acquainted with

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				Hieracium kneissaeum; the head of the municipality participated in the visit. Most of the participants had never hiked to Mount Kneisseh, which overtopped their village ; this tells of the transformation that this community had undergone on the path of appreciating their natural heritage and its protection. . Details are provided in the attached "Kneisseh community" report.
2.0	Improved Conservation of SRE in Kneisseh summit of Sannine-Rihane slopes and heights KBA	2.3	Report on current state of 3 SRE species assessed in the wild	3 SRE were investigated; their current state is reported in the attached "Kneisseh Report Final".
2.0	Improved Conservation of SRE in Kneisseh summit of Sannine-Rihane slopes and heights KBA	2.4	Conservation Plan with Local Participation	A conservation plan was prepared with the contribution of the local community. The plan was presented to the local authority for implementation. The municipality uncovered an agreement made 10 years ago; the agreement leased the heights of Kneisseh to a company for the development of a ski resort and platforms. The municipality of Kfarselwan is supportive of the protection of the SRE and the management of site to safeguard nature along with the previous engagement of leasing their communal land. Several management actions were undertaken. The municipality is connecting us with other stakeholders to improve site management with potential resources, such as collaborating with the 'Mountain Lebanon Trail' NGO to define a trail for visitation and limit access avoiding

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				frequenting threats to endemics. The conservation plan and progress are presented in the attached Kneisseh Report Final.
3.0	Improved Conservation of SRE in Makmel heights of Mount Makmel and upper Kadisha valley KBA	3.1	List of meetings and brief minutes verify sensitization of at least 10 influential stakeholders in the Bcharri village to the value of the KBA and significance of conservation of their endemics.	8 influential stakeholders were met to deliver the significance of conservation and the richness of the KBA. We connected with the head of the municipality but could not meet the municipal council due to the COVID-19 restrictions and limitations on meeting at the municipality especially that Bcharri witnessed several waves of COVID-19 and was subject to local lockdowns. The review of contacted stakeholders is presented in the attached report Makmel Community.
3.0	Improved Conservation of SRE in Makmel heights of Mount Makmel and upper Kadisha valley KBA	3.2	Attendance list and pictures of training workshop for 5 stakeholders and institutional members on botanical skills	In the region of Mount Makmel, the youth of Bcharri and nearing villages (33 participants, 71% females) were engaged to understand the value of the plant world and that of its protection. This was the first exposure of most of them on plant characteristics; they are fervent of their cedar forest, but they realized how ignorant they are of the life of the trees that they hold in awe and respect. In that, the training was very mind moving and triggered the inquisitiveness of the trainees to learn more. The trainees visited their neighbor Horsh Ehden Nature Reserve reserve, the HENR; this helped them realize the significance of conservation in all its aspects from the importance of plant protection, to reserve management, research, social and

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				economic significance and potentials to contribute to the local economy. Some youth participated with us on our field surveys. The trained members belonged to different institutions including teachers, agriculture engineers, physicians and other. Details are presented in the attached Makmel Community report.
3.0	Improved Conservation of SRE in Makmel heights of Mount Makmel and upper Kadisha valley KBA	3.3	Report on current state of 3 SRE species assessed in the wild	The 3 target SRE were studied in the wild, their current state is presented in the attached Makmel Report Final.
3.0	Improved Conservation of SRE in Makmel heights of Mount Makmel and upper Kadisha valley KBA	3.4	Conservation Plan with Local Participation	A conservation plan was prepared and presented to the municipality of Bcharri. The municipality of Bcharri cited concern toward the conservation of all the Makmel domain we researched as one nature reserve, because of earlier plans to expand the ski platforms over Makmel slopes. Skiing is a main winter attraction in this area and promotes an extensive local economy for the region. The conservation proposal was modified to endorse a complex of 3 protection modules (2 micro-reserves and 1 nature reserve) leaving access to potential ski development slopes outside protection plans. The head of the municipality promised to collect the approval of the municipal council and then submit the proposal to the Ministry of Environment. The conservation plan and progress of the collaboration with the municipality are

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				presented in the attached 'Makmel Report Final'.
4.0	Improved Conservation of SRE of Ehden Forest Nature Reserve of Mount Makmel and upper Kadisha valley KBA	4.1	Report on current state of 4 SRE species assessed in the wild with Dr. Magda (USJ)	The 4 target species were investigated and a report on their current state is developed in the attached "JMBR Report". FON conducted the field work, while USJ produced the germination protocols. The report was presented to the Association for the Protection of Jabal Moussa for guidance and implementation.
4.0	Improved Conservation of SRE of Ehden Forest Nature Reserve of Mount Makmel and upper Kadisha valley KBA	4.2	Enhanced Management Plan for better conservation of SRE species with Dr. Magda (USJ)	A management plan to enhance species conservation in-situ was prepared and presented to the reserve management. It was adopted for implementation. USJ supported with ex-situ conservation depositing seeds at USJ seed bank. The management plan is presented in the "JMBR Report Final".
5.0	Improved Plant Conservation of Jabal Moussa Biosphere Reserve in Keserwan-Jabal Mousa KBA	5.1	Attendance list and pictures of training workshop for capacity building of 3 stakeholders and institutional members on with botanical skills	With the Jabal Moussa Biosphere Reserve, 11 trainees (63% females) came from the villages around Jabal Moussa. Training of the managers, guides, staff and guards was very crucial to help them realize the level of biodiversity and species richness of the reserve. Trainees confessed they had never received such a profound training on plants, let alone on identifying the SRE through their special botanical characters. The role of plants at shaping the ecosystem and presenting the foundations for the complexity of the ecosystem was also highly significant to

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				discuss and contemplate on. The overall feedback was highly rewarding. All the participants took notes, engaged in discussions and were eager to learn more requesting more trainings and informative discussions. Details are presented in the attached report 'APJM training'.
5.0	Improved Plant Conservation of Jabal Moussa Biosphere Reserve in Keserwan-Jabal Mousa KBA	5.2	Report on current status of 4 SRE species assessed in the wild	The 4 target species were investigated and a report on their current state is developed in the attached "EHDEN Report Final". FON conducted the field work, while USJ produced the germination protocols. The report was presented to the Horsh Ehden Nature Reserve management team for guidance and implementation.
5.0	Improved Plant Conservation of Jabal Moussa Biosphere Reserve in Keserwan-Jabal Mousa KBA	5.3	Enhanced Management Plan for better conservation of plants, particularly endemic species, with Dr. Magda (USJ)	A management plan to enhance species conservation in-situ was prepared and presented to the reserve management. It was adopted for implementation. USJ supported with ex-situ conservation depositing seeds at USJ seed bank. The management plan is presented in the attached "EHDEN Report Final'.
6.0	Diffusing Project Deliverables to General Public	6.1	Pictures of Final Event and Press Release	The final event and press release were substituted in extension phase by the development of a documentary which will serve better under the circumstances of COVID-19 safety measures and will reach larger public. The documentary was developed and reviewed by CEPF. The documentary is available for public on FON YouTube channel

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				at the following link https://www.youtube.com/watch?v=77iqkFVi_ic

Tools, products or methodologies that resulted from the project or contributed to the results:

1- Training material manuals were prepared for trainees to be future reference for their field activities. They were presented in English and Arabic

2- Species distribution maps were prepared revealing the localities of the species at the explored sites.

3- Management plans were prepared for the reserves to improve protection of the SRE

4- Conservation plans were submitted to the municipalities of unprotected zone – Makmel and Kneisseh.

5- All the information on the species, their distribution, habitats, numbers and localities were compiled into site reports that also included management and conservation plans. The reports were delivered to the respective authority at the explored site. They are herewith submitted.

6- A documentary is produced to showcase the experience and expand the impact over longer time to larger public.

7- On project design:

After experiencing nearly 3 years of field work, we would like to reflect on project design.

A- Timing of Activities

Field work proved the usefulness and efficiency of the adopted project design, where the selection of species and sites was critical for the timing of activities.

- The range of selected species allowed for late winter exploration with the first species to flower being Cyclamen libanoticum at JMBR. The species requires extensive field work, which was afforded since it was the only species to be explored during this growth season at the respective altitude.
- The following species was Paeonia kesrouanensis at JMBR, this allowed the prolonging of exploration of the reserve.
- Salvia peyronii flowering starts nearly at the peak time of P. kesrouanensis.
- Within this window of time of the growth season, visits to HENR were required to cover the early flowering Ornithogalum libanoticum.
- As field work was concluded in JMBR, we moved to work in HENR where the advantage of altitude and latitude promoted cool wintery conditions longer pushing the spring by nearly a month and allowing a longer exploration of the humid dependent species of HENR.
- Again, due to altitudinal differences, the growth season at Mount Makmel did not start till end of May and early June, and progressed till September-October. Our field exploration was concentrated from July to September.
- Mount Kneisseh was explored in all seasons from April to October to search for the target species. Field work timing coincided with that of Mount Makmel especially for Hieracium which flowers late (July-August). This necessitated the

engendering of external professional support to be able to cover two very distant sites (Makmel and Kneisseh) at the same time.

Timing of project activities with the growth season of species is critical for the success of field work and conclusive field investigations.

B- Project Duration

Providing two growth seasons for fieldwork proved imperative to revisit gaps and incomplete actions. It is difficult to control weather conditions and all eventualities to undertake the exploration of several species in a single growth season. In 2019, March was very rainy, which made accessibility of Cyclamen terrain very difficult particularly that the habitat of rocks and boulders would be very slippery. For Hieracium kneissaeum for example, the species was hard to find, only few samples were discovered in the first season. A second growth season was necessary to revisit the habitat and locate other samples. Similarly, it was an astonishing surprise not to find any Allium sanninaeum in its main habitat; a second exploration season was obligatory to confirm this unfortunate finding which questions the fate of the species.

All our future projects will consider two growth seasons for any field explorations of species.

PORTFOLIO INDICATORS

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
2.0	Number of KBAs under improved management and number of hectares covered			2,300	In Sannine-Rihane slopes and heights KBA, 460 ha of Mount Kneisseh are receiving better management and reduced threat of frequenting, littering and grazing. Access control will be limited to one least disturbing trail; contorted tree remnants will be trimmed to reshape into trees. Other measure are also planned. In Keserwan-Jabal Moussa KBA, 1330 ha of JMBR are

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					addressed with improved management plan to safeguard species progress; type of management is determining carrying capacity and limiting visitation to sensitive zones, preserving the mapped sensitive habitats from trail opening and accessibility especially that management supported opening new trails which scored increased in number of visitors, supporting canopy cover to maintain shadiness as a critical factor for species survival. (improved management is not only in doing but also in not doing, like not opening trails). In Mount Makmel and upper Kadisha valley KBA, 520 ha of Horsh Ehden Nature Reserve received management plan to improve species protection; type of management is excluding the mapped sensitive habitats from opening trails and providing access particularly that several new trails were opened in the reserve and some even crossed near

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					and exposed A. ehdenensis specimens; fencing A. ehdenensis samples on trails to avoid trampling, modifying the course of trails where fencing is inapplicable. Monitoring of boar settlement to advise better control if it grows threatening to species and habitats.
3.0	Number of sites that gain official permanent protection status and number of hectares covered			0	0
4.1	Number of threatened plant species seeing status improved (i.e., short-term increase in population and/or breeding success)			2	- First year of exploration of the CR Hieracium kneissaeum, only 3 flowers were remarked; whereas in the second year of field exploration, 23 flowers were counted. Increasing awareness to the significance of Mount Kneisseh, and reducing pressures of overgrazing and trampling allowed the plant leaves to grow sufficiently to provide nourishment to promote better flowering. It is expected the number of flowering members will

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					continue to increase under the improved protection conditions. - The protection of Astragalus ehdenensis members subject to pressures on trails promoted improved growth of stems and leaves and the progress of flowering stems to maturity and seed set.
4.2	Number of unprotected sites important for plants with improved management practices			1	With the support of the municipality of Kfarselwan and local community, the unprotected Mount Kneisseh is receiving larger attention for the protection of the flora and for threat reduction from existing pressures of frequenting, trampling, littering, campfires and grazing. Herdsmen have reduced infringement on the sensitive habitats and areas of significance for species protection. Youth have engaged in reduction of visitation threats. Municipal police are more aware of the threats to report them in order to take respective actions.
4.3	Number of management plans			2	1 management plan with plant conservation actions

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
	of protected areas incorporating specific actions for plant conservation				to better preserve the SRE was adopted into the management plan of the Jabal Moussa Biosphere Reserve 1 management plan was also adopted into the management plan of the Horsh Ehden Nature Reserve
4.4	Number of protected area managers demonstrating improved skills and knowledge on plant conservation			5	3 PA managers of the Association for the Protection of Jabal Moussa received enhanced knowledge and improved skills to comprehend the value of the natural ecosystem they are protecting and the endemic species that are hosted by this system. 2 PA managers of the Horsh Ehden Nature Reserve acquired improved skills and knowledge on endemic species, ecosystem and conservation approaches.
4.5	Number of locally endemic or highly threatened plant species for which improved knowledge is available			13	All the 13 species listed for exploration of their current status in the wild were investigated; significant knowledge was generated on their population size, distribution and ecological requirements, as well as,

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					the threatening pressures and their current and future impacts.
4.7	Number of young professionals with substantial experience in plant conservation gained			7	7 young professionals (5 females, 2 males) were trained on plant conservation aspects and practices, shared field activities, the preparation of training material and evaluation material. They are now skilled to recognize species, habitats, threats and required protection actions. They are assets to work on conservation projects.
4.6	Number of KBAs for which information on plants is improved			3	In Sannine-Rihane slopes and heights KBA (LBN15), information on state of plants and natural system has been greatly improved revealing alarming impact of historical and exiting threats. In Keserwan-Jabal Moussa KBA (LBN07), a significant package of information has been generated on endemic plants and natural systems; key habitat characteristics for the survival of endemic plants have been uncovered.

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					In Mount Makmel and upper Kadisha valley KBA (LBN15), high mountain to alpine systems were treated producing generous information on endemic plants and their requirements.
4.8	Number of plans adopted at the national level with improved integration of plant conservation needs			0	0 (2 plans were prepared and submitted to local authorities, but did not reach the level of national recognition. The social, economic and health challenges weighed heavily on the official progress of activities; meetings with municipalities were postponed many times due to lockdown or lack of fuel or other impediments. The Ministry of Environment is not in a better state either to receive and process any applications; employees are not attending regularly and committees are not meeting; all applications are being stalled. Yet, the intention of the municipalities of both Bcharri and Kfarselwan to

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					progress with the conservation proposals are sincere; they will be followed up on by FON and local communities.)

GLOBAL INDICATORS

Protected Areas

Protected areas that have been created and/or expanded as a result of the project. Protected areas may include private or community reserves, municipal or provincial parks, or other designations where biodiversity conservation is an official management goal.

Name of Protected Area	WDPA ID*	Latitude	Longitude	Country	Original Total Size (Hectares) **	New Protected Hectares ***	Year of Legal Declaration or Expansion

*World Database of Protected Areas

**If this is a new protected area, 0 should appear in this column

*** This column excludes the original total size of the protected area.

Key Biodiversity Area Management

Key Biodiversity Areas (KBAs) under improved management—where tangible results have been achieved to support conservation—as a result of the project.

KBA Name	KBA Code	Size of KBA	Number of Hectares with Improved Management
Sannine-Rihane slopes and heights	LBN15		460
Keserwan - Jabal Mousa	LBN07		1,330
Mount Makmel and upper Kadisha valley	LBN09		520

Production Landscapes

Production landscapes with strengthened management of biodiversity as a result of the project.

A production landscape is defined as a site outside a protected area where commercial agriculture, forestry or natural product exploitation occurs.

Name of Production Landscape	Latitude	Longitude	Hectares Strengthened	Intervention
Mount Kneisseh	35.797158	33.840629	460	Mount Kneisseh constitutes the communal land of Kfarselwan village. The Eastern slopes were leased by the municipality to herdsmen from outside the village, whereas the western slope overlooking the village were leased to the herdsmen of Kfarselwan. Thus, the mountain was used as rangeland for raising livestock, mainly goats, and for dairy production. Only 4 herdsmen from Kfarselwan grazed at the terrain but not exclusively, they also leased many landlots from private owners.

Name of Production Landscape	Latitude	Longitude	Hectares Strengthened	Intervention
				The herdsmen were engaged to learn of the natural riches of their mountain and the level of threat the herds exert on the endemics. They acknowledged the importance of the natural terrain and agreed to reserve the communal lands for natural progress, while they graze elsewhere. The municipality also agreed to stop leasing the eastern slopes. As a result, a re-organization of the rangelands was adopted, and the communal land was re-allocated from rangeland to reserved land in order help biodiversity re-establish its populations with the consent of herdsmen.

Benefits to Individuals

- **Structured Training:**

Number of Men Trained	Number of Women Trained	Topics of Training
34	72	Plant life cycle, Botanical characterization, species identification, ecosystem health, endemism, threats, conservation measures and modules, conservation management

- **Cash Benefits:**

Number of Men – Cash Benefits	Number of Women – Cash Benefits	Description of Benefits

Benefits to Communities

View the **characteristics** column below with the following corresponding codes:	View the **benefits** column below with the following corresponding codes:
1- Small Landowners	a. Increased Access to Clean Water
2- Subsistence Economy	b. Increased Food Security
3- Indigenous/ Ethnic Peoples	c. Increased Access to Energy
4- Pastoralists / Nomadic Peoples	d. Increased Access to Public Services
5- Recent Migrants	e. Increased Resilience to Climate Change
6- Urban Communities	f. Improved Land Tenure
7- Other	g. Improved Use of Traditional Knowledge
	h. Improved Decision-Making
	i. Improved Access to Ecosystem Services

Community Name	**Community Characteristics**							**Type of Benefit**									**Country**	**Number of Males Benefitting**	**Number of Females Benefitting**
	1	**2**	**3**	**4**	**5**	**6**	**7**	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**			
Village of Kfarselwan	☒	☒	☐	☒	☐	☐	☒	☐	☐	☐	☐	☐	☒	☒	☒	☒	Lebanon	8	27
Village of Bcharri	☒	☒	☐	☒	☐	☐	☒	☐	☐	☐	☐	☐	☒	☐	☒	☐	Lebanon	10	23

Characteristics of "Other" Communities:

- Village of Kfarselwan: rural community
- Village of Bcharri: rural community

Policies, Laws and Regulations

View the **topics** column below with the following corresponding codes:			
A- Agriculture	E- Energy	I- Planning/Zoning	M- Tourism
B- Climate	F- Fisheries	J- Pollution	N- Transportation
C- Ecosystem Management	G- Forestry	K- Protected Areas	O- Wildlife Trade
D- Education	H- Mining and Quarrying	L- Species Protection	P- Other

No.	Name of Law	Scope	Topics														
			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

"Other" Topics Addressed by the Policy, Law or Regulation:

No.	Country/ Countries	Date Enacted/ Amended	Expected impact	Action Performed to Achieve the Enactment/ Amendment

Companies Adopting Biodiversity-friendly Practices

A company is defined as a for-profit business entity. A biodiversity-friendly practice is one that conserves or uses natural resources in a sustainable manner.

Name of Company	Description of Biodiversity-Friendly Practice	Country/Countries where Practice was Adopted

Networks and Partnerships

Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable.

Name of Network/Partnership	Year Established	Country/ Countries	Established by Project?	Purpose
informal network for biodiversity conservation and livelihood support	2020	Lebanon	Yes	The network was started with the reserves to further project activity, it then grew to encompass the different teams we collaborated with. Friends of Nature is central for the network which includes the Association for the Protection of Jabal Moussa NGO, the Horsh Ehden Nature Reserve management, the Women Association of Kfarselwan NGO, the Lebanese Wildlife NGO, the Institute of Management and Services NGO, and the youth of Bcharri. The members are interconnected to provide advice, knowhow and consultation. The aim of the network is to create a solid collaborative unit that interconnects several regions of the country in order to exchange information, capacities and skills, and to partner on the development and implementation of projects that benefit biodiversity and communities. We are looking at supporting conservation with ecotourism to enhance local economies and to link biodiversity to livelihood tapping on the resources and skills of partners and the local communities we are working with and for.

Sustainable Financing

Sustainable financing mechanisms generate funding for the long-term (generally five or more years). These include, but are not limited to, conservation trust funds, debt-for-nature swaps, payment for ecosystem services (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation.

Name of Mechanism	Purpose	Date Established	Description	Country/ Countries	Project Intervention	Delivery of Funds?

Globally Threatened Species

Globally threatened species (CR, EN, VU) on the IUCN Red List of Threatened Species, benefitting from the project.

Genus	Species	Common Name (English)	Status	Intervention	Population Trend at Site
Iris	cedreti		CR	improved species monitoring to take action if any threats are induced to the existing habitats of the species, which fall now in the vicinity of urban development region for summer and winter resorts.	Stable
Allium	sannineum		EN	species monitoring will continue at the site which is supposed to be a major habitat for the growth of the species. Field survey over two years failed to locate one living member of the species, although we extended the survey to nearing mountain slopes. Intensive grazing is suspected to have caused the uprooting of species members as many other Allium species. The species will be monitored onsite to check whether protection from grazing would allow immature undistinguished members to grow back.	Decreasing
Lathyrus	libani		EN	2 management plans that address the species from different aspects including population extension and distribution, population size, habitat preferences and threats, regeneration and other were adopted by the governing reserves to improve species habitat protection and monitoring.	Stable

Genus	Species	Common Name (English)	Status	Intervention	Population Trend at Site
Ornithogalum	libanoticum		EN	2 management plans that address the needs of the species for better protection and monitoring at its natural habitat were adopted by the governing reserves (HENR, JMBR); the management plans provided basic information on species distribution, population extension, threats, regeneration capacities, flowering and seed capacities and other factors to support long-term monitoring.	Stable

LESSONS LEARNED

The period of implementation of the project witnessed unexpected challenges on national and global scales. Nationally, a phase of socio-political turmoil commenced in the autumn of 2019, it was later compounded with the global health outbreak of COVID-19 which forced in the early phase a complete lockdown and ceasing of all activities. Confinement measures tightened at times and relaxed at other times, but the local economic and financial crises continued to exacerbate. Within this turmoil, we benefited from every opportunity to continue field work because losing a field season would need a whole year to recover the possibility. We faced this situation with Cyclamen libanoticum which is the first blooming plant of our target species; we planned to fill the gaps in field activity during winter of 2020 (February-March) however that period was labelled with strict lockdown. We needed an extension phase into 2021 to complete our work. Yet, field research was much easier to cope with than working with communities. People were very cautious to connect, particularly that the two of our sites, Makmel-Bcharri and Kneisseh-Kfarselwan, witnessed severe rounds of COVID-19 and were themselves exclusively locked for months due to the high spread of Corona virus. People were generally depressed, and lost faith in persevering under the impact of the financial crisis that affected every home. We had to put a lot of effort to comfort people, maintain contact, progress at their convenient pace yet pushing to develop activities that were postponed over and over until we finally succeeded at grouping the community members and conducted the trainings and activities. The situation of collaboration with the local authorities was much worse; local authorities abided by the official regulations of reducing the number of employees and applying rotations allowing one employee in office at a time. That with the financial crisis that obliged absence of employees totally impaired the efficiency of local and central authorities; processing of requests and meetings took forever. Amidst this turmoil, we had to remain focused, to try to develop and maintain schedules although we faced successive delays and postponements. We had to be patient, never cease to attract the interest of the stakeholders, and to find the justifications to reduce their stress, fear, lack of interest, and psychological pressures and to inspire them to move forward and resume activity to help themselves and their communities. Finally, it worked but it took a lot of time and precious efforts, and not without a price though; we could not progress the conservation of the unprotected sites to the stage that we aspired. We will continue to follow up on these processes until completion, although the situation at the central authority is not any better than the local authorities and processes are delayed without time limits. The positive outcome is that this strengthened our capacity to coordinate, implement, and maintain stakeholder interest and productivity under the stressful conditions and to push the activities of the project to a stage where sustainability of impact and building of progress can be secured. This was one of the most important lessons we gained on the project.

Managing physical fitness and endurance was an important element that helped us achieve better on field work. We surveyed some of the very difficult terrain as per topographic nature, these were not open landscape but mostly rocky and formed of small successive hills so we had to descend and climb again and explore narrow passages. It was amazingly beautiful but it was also quite tough on our abilities and endurance with three ladies running the field survey. We worked on dividing the terrain based on the physical abilities and fitness of team members, one was assigned the lower range of the hill slopes and the flat areas, second the higher range and the project coordinator took the tops of hills and enclosed areas. End of the day our ankles would hurt terribly due to a day of balancing our steps between rocks and stones. It is definitely a learned lesson to manage the field exploration efforts based on the fitness of the working team to be the most efficient and productive.

Perseverance on field work and evidenced information were also an important image and message to convey to the target communities and trainees. They saw us working on the sites over and over. This has built confidence that the experience we bring is sincere and applied, and the information we present stems from real experience at their own sites, and that the effort we were investing must be for something so very important at their regions that they must listen, know and support. For example, some of the villagers of Kfarselwan never visited their mountain (Kneisseh) and never knew of its beauty or significance, so they were indifferent towards its fate. But when they realized that these "strangers" are putting the effort and taking the toll of screening the area meticulously, it created attachment and concern beyond their inherent indifference. Nurturing the social and emotional dimension with evidence, perseverance and communication is an valuable lesson that we will capitalize on in all our future activities.

One of the impactful surprises was the positive response of rural communities to learn of botanical details, which they considered the extended beauty of living beings and appreciated the level of specialization of plants. We were hesitant when we prepared the training modules to provide the detailed story and we were ready to remedy the situations as they arise. Here again, we learnt to trust more in the capacity and passion of rural communities to engage, integrate and learn new information. We will capitalize on this experience and employ this strategy of raising our expectations of local communities and preparing alternative scenarios to cope with any overestimation of receptivity of communities.

Visiting an established conservation module generated a very positive impact on local community commitment to conservation; sensing the value of conservation and experiencing the range of activities that are encompassed therein from reserve management to administration, communication, field activities, ecotourism and other had a remarkable impact on the perception of trainees for conservation. Comparing the state of natural assets falling under conservation with the state of degradation that the trainees have in their villages and natural surrounding touched them profoundly and inspired them to act to improve the state of nature in their own communities. This training module will continuously be integrated in our projects and future plans for conservation.

Collaborating with municipalities on resolving conflicting issues that would impede their commitment toward conservation was also an important lesson. In Lebanon, trends for urban development are more appreciated over conservation and bear social and cultural connotations of success and prosperity; the conflict between development and conservation will always be faced throughout the country. We learned not to be dismayed by the general support of municipalities to development projects but to persevere on providing positive arguments, not to take a reserved negative attitude toward development, to negotiate further and further until we discover the possibility of resolving the conflict intelligently without jeopardizing conservation potentials. Municipalities will not do that, they are not capable nor accustomed, it relies on us NGOs and people active in the field to present the solutions. In the end, we reached states of conflict resolution with the two municipalities responsible for the sites we worked on, Mount Kneisseh and Mount Makmel.

SUSTAINABILITY/REPLICATION

The project was successful in all its aspects from species to communities. It showcases an integrated module of research, field work and local community engagement to support conservation of significant natural assets. The project strategy, outcome, tools and

methodologies are all replicable and can be used at other sites and with other communities to enhance the conservation of KBAs.

The impact of community engagement was a real success; the feedback that we received was very rewarding in spite of the difficulty of the topic (botanical and ecological settings) and the pressuring social and political conditions. The training modules associated with field visits and conservation visits provide a successful comprehensive program for effective community engagement on conservation of natural heritage. It engendered a sustainable impact that was sensed in the reaction of community members, their follow up, care and the initiatives they took and organized. The testimonies of community members interviewed for the documentary of the project provide good evidence to the profound and lasting impact of the engagement program, which is surely replicable for other sites and with other communities. The impact of the program though should be harnessed into actions and further activities that communities can undertake to express the impact into meaningful and perpetual chain of impacts; this is aspired in the following phase.

FON extended the impact of the community capacity building to Horsh Ehden Nature Reserve and Ehden community with the support of the reserve management team, in order to provide equal benefit across the target communities. This does not feature in the project direct deliverables, but FON will not spare an opportunity to expand and replicate benefits. The PA manager assembled 20 participants (50% females) to take the training including the reserve team and members of the community supportive of the reserve and its activities. The impact was amazing; trainees were surprised to the level of specialization of plants. The training helped them better recognize the value of the reserve and the importance of adhering to strict conservation measures in order to help protect the delicate and endemic plants from any threats. Trainees became zealous to engage in and support the protection of the reserve and help the management team to carry out protection measures. The impact of the training fruited immediately; one of the trainees organized a training day for the children of the village to expose them to the plant world and the value of protection of natural beings. It is important to reveal that the training motivated the community members to act and take initiatives to expand knowledge and engagement in conservation.

Project design from the target species to the selected sites proved very useful to support the accomplishment of project outputs; the target species allowed the scheduling of field work all year round instead of having intensive field work concentrated within a short season, which would put a lot of pressure on the implementing team and may result in inability to cover all the field activity. Considering two growth seasons for field surveying of species is very important to revisit any gaps and readdress any shortcomings, particularly that field work is very time and effort demanding; unexplored terrains can also present various challenges. We are very pleased with the design of the project and we will use the same strategy in our future projects.

ENVIRONMENTAL AND SOCIAL SAFEGUARDS/STANDARDS

The activities of the project did not trigger any safeguards.
The two reserves are already protected.
The two unprotected mountain sites have their particularities:

- Mount Kneisseh: herdsmen of Kfarselwan lease the grazing grounds from the municipality or from the private owners. They have plenty of grazing grounds that they were in favor of protecting the site of H. kneissaeum and they requested the marking of the site to help them identify the territory to refrain from entering it. They are also concerned as other community members to protect their natural heritage.

- Mount Makmel: Mount Makmel is facing a land ownership problem among the surrounding villages, which escalated to armed conflict. The Lebanese army limited access to the heights; for that, the herdsmen did not lease the sites of Makmel. The proposal for the conservation of the heights of Mount Makmel is actually providing a peaceful resolution for this conflict by putting the landscape under protection for the benefit of the public good where land ownership is not an issue of concern anymore. (Mount Makmel report reveals details).

ADDITIONAL COMMENTS/RECOMMENDATIONS

- Working with CEPF team was an experience by itself. We are highly thankful for the level of trust, transparency, and objectivity that guided our relation; the collaborative spirit is also greatly appreciated. Our experience with the RIT team is also valuable treated with the same qualities of trust, support and guidance. The smooth interaction with all was very remarkable. We are very sincere with our comments because we have experienced work environments with other donors and we did not meet the same atmosphere.
- The system for monitoring of project progress is very helpful, clear, and well-instructive; it highly facilitated reporting. Alerting us to upcoming reporting schedules through the automated messages helped us punctuate our schedules.
The smoothness of the financial reporting is also highly appreciated because financial issues are critical and are usually associated with complex reporting systems, whereas your employed system of reporting and verification is very friendly and the financial officers of CI are highly considerate and supportive.
Briefly, the whole system is built to enhance grantees' productivity and performance, thank you for that.

it is also important to acknowledge the strong capacity building of FON potentials gained through the project:
- on human resources, FON capacities were enabled with a skillful well trained team of enhanced abilities for field work, botanical knowledge, community engagement and communication
- on training potentials, FON gained a full package for botanical training with manuals and training program of ensured success
- technically, FON was supported with necessary equipment for field activity, workshops as well as visual documentation; also at the level of technical skills, FON capacity at mapping flora was strongly enhanced
- on networking and communication, FON had the chance to enlarge the scope of connecting with rural communities, municipalities and NGOs and to engender collaboration on longterm commitments.
- administratively, the project enhanced our capacities with a set of procedures, policies and templates that were integrated into our operations.
FON is greatly thankful for these advancements.

We would like to note that the "Red List Species" database of this portal lacks links to some of the species treated in this project and featured on IUCN Red List, including CR Hieracium kneissaeum, CR Salvia peyronii, CR Senecio blanchei, EN Cyclamen libanoticum, EN Astragalus ehdenensis, EN Astragalus cedreti.

ADDITIONAL FUNDING

Total Amount of Additional Funding Actually Secured (USD)	$16,040.00
Breakdown of Additional Funding	1- FON supported all the office operations required for the project over its duration, FON provided all the office equipment and maintenance, and the running expenses to support team activity (water, electricity, internet, phone, printing, ..), and communication expenses during field work. We evaluated office support for 26 months out of the 35 months of project duration considering that in lockdowns we worked from home. We estimated the in-kind support at an average of 300 $ monthly, thus amounting to 7,800 US$. 2- FON provided food and water support on field days with expenses ranging between 15-25 $ a day. For an average of 20$ a day and for a total of 307 outdoor days over 3 years, FON has provided in-kind support of about 6,140 US$. 3- 3 stakeholders hosted and accommodated the trainings of the project: Horsh Ehden Nature Reserve hosted 1 full day workshop at their office, Municipality of Kfarselwan hosted 1-full-day-workshop 3 times and provided coffee and snacks, Association for the Protection of Jabal Moussa hosted 3 afternoon-evening workshops. This saved the need to rent workshop space, which we were obliged to support at Bcharri for 300$ a day. Taking the same rate as Bcharri, the stakeholders provided in-kind support equivalent to 2,100 US$.

INFORMATION SHARING AND CEPF POLICY

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. For more information about this project, you may contact the organization and/or individual listed below.

The Friends of Nature NGO, friendsofnaturelb@gmail.com