**Small Grants – Final Completion and Impact Report**

**Organization Legal Name:** Biodiversity and Environment Research Centre (BERC)
**Project Title:** Engagement of Local Communities in the Conservation of the Threatened Ecosystem and Plant Species in the Nablus Region, Focusing on the Iris of Nablus, Palestine
**Grant Number: CEPF Nu. 110692**
**Date of Completion of this Report:**
**CEPF Hotspot:** *Mediterranean Basin Biodiversity Hotspot*
**Strategic Direction:** SD 4 (Plant Conservation), Strengthening civil society participation to support the conservation of plants critically endangered or of limited range
**Grant Amount: $ 25,709.00**

**Project Dates: 1st April, 2020- 31 May, 2022**

**PART I: Overview**

1. **Implementation Partners for this Project** ***(list each partner and explain how they were involved in the project)***

| Number | Name of partner | How they were involved in the project | Additional information |
|---|---|---|---|
| 1 | Palestinian Environmental Quality Authority, EQA (Directorate of natural resources) | One of the most important partners who helped in the implementation of the project activities by facilitation, support, and participation in the project activities. Helped with MOA in the selection of the most appropriate sites for the creation of our safe havens for the protection and conservation of Sawsan Nablus. Our results concerning the publication of Analysis of floristic composition and species diversity of vascular plants native to the State of Palestine (West Bank and Gaza Strip) are also taken into account by EQA. | Dr. Isa Odwan Mr Mohamme Mahasneh |
| 2 | Ministry of Agriculture, MOA (General Administration of Forests, Rangeland and Wildlife) | The second most important partner, the department support the establishment of safe havens for the conservation of Sawsan Nablus by allocating 3 sites of special protection zones for Sawsan Nablus plant, and participation in the project activities. Providing fencing material for the protection of the conservation sites from grazing. | Eng. Husam taleeb Eng. Thaer rabi |
| 3 | Qeshdeh Nursary, MOA. | Mr Samir Abu Khaizaran from Qeshdeh nursery helped in the preparation of the safe haven at Qeshdeh for the conservation of Sawsan Nablus by fencing the site, and participation in planting of iris seedlings | |

| Number | Name of partner | How they were involved in the project | Additional information |
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| **4** | Environment Quality Authority office-Nablus | Participation in the project activities including seminars, workshops, field trips, help in coordination with Nablus Municipality, Governor, and directorate of education in Nablus. | |
| **5** | Directorate of Agriculture in Nablus City | Cooperation in the selection of the safe haven sites at The Forest of Martyr Yasser Arafat, and at Al-Bathan Talouza Forest, and the preparation of surveying maps for these sites, and participation in the project activities, including seminars, workshops, and planting of seedling. | |
| **6** | Directorate of Agriculture in Tubas | Cooperation in the preparation of the conservation site at the Botanical Garden at Qeshdeh near AlMikser-Seris Nature reserve, by providing fencing for the site, and arrange for its installation. | |
| **7** | Aqraba municipality and the local community | It was our partner for the creation of the safe haven for Sawsan Nablus at at Aqraba public garden, and help in the localization of the plant populations at Aqraba which help in the mapping Sawsan Nablus populations in the area. | |
| **8** | Usarin Village Council and the local community | Help in the localization of the Sawsan Nablus populations in Usarin, which contribute to the mapping the plant populations in Usarin. | |
| **9** | Duma Village Council and the local community | Contribute in the mapping the plant population in Duma village by helping in the localization of the plant distribution site in the village area. | |
| **10** | Al-Bathan Village Council | Cooperation in preparation of the conservation site at Al-Bathan Talouza and localization of iris lortetii populations at Al-Bathan and Wadi Al-Marash. Coordination with Al-Bathan Secondary school to be involved in Planting the conservation site at Al-Bathan Talouza site, and participation in the seminars. | |
| **11** | Yasid Village Council | Cooperation in the conservation of the plant populations in the village area, by allocating a site for the rescue of the plant populations under threat (near quarries). | |
| **12** | Nablus Governor office | The idea of using *Sawsan Nablus* as a symbol for Nablus District has been discussed favorably with the governor's office. The governor's representative Mrs Mai Hijjawi has participated in the project activities (e.g., final workshop, field trips for the conservation sites and iris natural sites in Nablus city. | |
| **13** | Directorate of Education | Coordination to carry activities related to the project at schools, by providing BERC with the permission to carry the activities a schools | |

| Number | Name of partner | How they were involved in the project | Additional information |
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| **14** | Al-Bathan Secondary School | Participation of the 12th grade students and their teachers in the seminar on importance of plant biodiversity with emphases on endemic plants. Participation the protection of the plant by planting the seedlings of Sawsan Nablus at Al-Bathan Safe Haven. | |
| **15** | Til Secondary school for Girls | Training and plant protection by participation in planting the plants at the National Site for the Conservation of Royal irises and Endangered plants at BERC-Til Botanic Gardens | |
| **16** | Mohammed Bin Rashid Al-Maktoom elementary School for boys-Til | Training and plant protection by participation in planting the plants at the National Site for the Conservation of Royal irises and Endangered plants at BERC-Til Botanic Gardens | |
| **17** | Yasid elementary school for girls | Conservation of plant population in the school | |
| **18** | Mr Nawaf Al-Amer | Contribution in surveying plant populations at Wadi Almarash, and Wadi Al-bathan | |
| **19** | Mr Abd Alsalam Awwad | Participation in field trips for the localization of plant populations at at Awarta village | |
| **20** | Mr. Anwar Dawabsheh | Participation in field trips for the localization of plant populations at Duma village | |
| **21** | Mr. Rami Abd Al Mu'ti | Participation in field trips for the localization of plant populations at Usarin village | |

**2. Summarize the overall results of your project**

- We mapped data on historical distribution of Iris lortetii var samariae (Sawsan Nablus) in its only distribution area (Nablus Mountains, Palestine). New records of *Iris Loterteii* and other plant species distribution sites were uploaded and documented on the Global Biodiversity Information Facility (GBIF). Knowledge about Iris loterteii var samariae distribution has been updated. The plant extent of occurrence dropped from 427.23km$^2$ to 182.188 km$^2$, and area of occupancy changed from 108km$^2$ to 60km$^2$. The status of Sawsan Nablus in Nablus Mountains has been assessed according to the Red List of Threatened Species of the International Union for Conservation of Nature criteria, and maps on the distribution of Sawsan Nablus have been prepared (Annex 1, Distribution maps of Sawsan Nablus).

- A network of sites was established in partnership with EQA and MOA composed by 7 locations which are : The Forest of the Martyr Yasser Arafat, The forests of Talouza- Al-Bathan, and at Qeshdeh-Seris reserve, 3 local communities and the BERC botanical garden. The main objective will be to follow up on iris conservation in farms and private lands where the species occurs. The network of conservation sites will be dedicated in situ-conservation (Annex 2).

- Assessment of *Iris lortetii* var *samriae* status according to the IUCN criteria for plant red listing. The assessment revealed that populations of *Iris lortetii* var *samariae* are decreasing,

and the plant status is expected to be Endangered (EN) (Annex 3). In addition, we identified the different threats that the plant is facing in its natural habitat including: minning and quarrying, urbanization (residential development), road construction, shifting agriculture, and up-rooting of the plant (Annex 4)

- BERC team was successful in the germination of *Iris lortetii* var *samaria* and *Iris hyenei* seeds using a modified protocol of the forced germination method (https://arilsociety.org/articles/YB06-15-24--Another-Look--Forced-Germination--Elm-Jensen.pdf) (Annex 5 A, B). The germination rate was about 80%, which will enable us to produce the seedlings and enrich the plant populations either in identified sites, or in its natural habitats

- The flora of the study area of Seris Al-Mikser reserve and Qeshdeh have been surveyed, and results of the flora of the state of Palestine have been published at the scientific international journal "Biodiversity data Journal": Analysis of floristic composition and species diversity of vascular plants native to the State of Palestine (West Bank and Gaza Strip) (Paper in Annex 6).

Molecular characterization of Iris lortetii var samariae, *Iris haynei*, and *Iris atrofusca* has also been studied using RAPD and ISSR primers in addition to characterization of I. loterteii morphologically using morphological descriptors. A phylogenetic tree was constructed with the results of 13 RAPD primers on 83 royal irises isolates (Iris lortetii vara samariae, I. haynei, and I. atrofusca) using the maximum likelihood tree (Annex 7). In the phylogenetic tree, Iris isolates were clustered into two main groups corresponding to the three royal iris tested, in which all Iris lortetii var samariae isolates formed a common branch, while *I. hayenei*, and *I. atrofusca* formed a sister branch.

**3. Briefly describe actual progress towards each planned long-term and short-term impact (as stated in the approved proposal)**

a. Planned Long-term Impacts - 3+ years (as stated in the approved proposal)

| **Impact Description** | **Impact Summary** |
|---|---|
| Increase knowledge and skills to support plant conservation assessment and planning (particularly the Nablus Iris and endemic plants in the study area), and promote the emergence of a new generation of young conservation professionals | The surveys has resulted in the publication of the very first annotated checklist for the native vascular plants of the State of Palestine including endemic and threatened *Iris loterteii*. This research article has been published in Biodiversity Data Journal: Analysis of floristic composition and species diversity of vascular plants native to the State of Palestine (West Bank and Gaza Strip) https://bdj.pensoft.net/article/80427/ |
| Suggesting and developing plans for the management of natural reserves within the study area | None of the species distribution sites is in protected area; all are in private lands owned by the community members. BERC is suggesting a regulation for Iris loterteii and other threatened plants. In Sawsan Nablus case, the land owner should consult the related authority to ensure the transfer of the iris populations, to an identified site, if he is going to make any changes on the land (Annex 8). |

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| Supporting the integration of plant conservation into the practical procedures followed (currently) by the Department of Protected Areas | Two of the Sawsan Nablus safe havens have been established in Governmental lands affiliated to the MOA and managed by the General Administration of Forests, Range land and Wildlife which is responsible for the management of protected areas in Palestine. These sites (Qeshdeh, and Talouza Al-Bathan forest) are not considered among the so-called nature reserves, but they have some sort of protection through its affiliation to the MOA. No management plans are available for these site. However, we prepared a management plan to a biodiversity rich area (BERC Botanic Gardens) (Annex 9). |
| Supporting innovative measures to conserve Sawsan Nablus populations that are outside protected areas. | Establishment of a net of safe havens outside the protected areas will help in the preservation and conservation of iris and other endemic endangered plants in its natural habitats. The team leader at BERC (Prof. Mohammed S. Ali-Shtayeh), is an Environmental specialist among the team responsible for spatial planning project in Palestine (The planes are still under production for approval by EQA). In one of his reports he suggested the establishment of a network of micro-reserves in places where endangered plant species occurred, for example the endangered Sawsan Nablus, and other endemic threatened plants, or other species which are threatened according to the IUCN red list. The suggestion included 1 conservation site at each area of the plant distribution sites (10 conservation sites in Total) (Annex 10). |

b. Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal)

| **Impact Description** | **Impact Summary** |
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| Determining the components of plant biodiversity in the study area | The checklist was prepared including 696 plant species belonging to 74 families of which 63 plants are endemic or sub endemic to Palestine and neighboring countries including Jordan, Lebanon, Syria, Israel, and Egypt. 166 species of these plants were considered as rare while, 181 are very rare (Annex 11). |
| Knowing the protection status of biodiversity in the study area | Determination of the protection status and identification of different threats to biodiversity in the study area will help to come up with suggestions to confront these threats in cooperation with Directorate of natural resources (EQA), and General Administration of Forests, Rangeland and Wildlife who are responsible on the management of reserves. The protection status of the biodiversity in the study area is endangered. Several threats have |

| Impact Description | Impact Summary |
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| | been observed and recorded including among others: the conversion of land use, pollution, and fire (Annex 4). Some of these factors are critically threatening the biodiversity in the study area which need immediate and urgent action for the protection of Biodiversity in the area. |
| Determining the distribution sites of the current Sawsan Nablus in the study area | A literature review was conducted on the distribution of Iris lortetii var samariae (1980-2019) to determine the growing areas and distribution range of the plant. The review results shows that *Iris lortetii* var *samariae* is naturally occurring in 13 main communities distributed over 27 sub-communities (Annex 1). The Majority of these sites are in Nablus Mountains. Conducting geospatial analysis of the species using the geospatial conservation assessment tool to calculate Extent of distribution of Sawsan Nablus Based on previous studies, has shown that the plant was distributed over an area of 108 km2 (AOO) and a range of 427.234 km2 (EOO).<br>The results of the field survey in the current study (2020-2021) have shown that all populations of the plant are located in natural areas outside the protected areas. The number of Sawsaneh Nablus populations monitored by the research team reached about 7 main plant populations in the Nablus governorate, distributed among: Yasid (3 sub-communities), Beit Dajan (community), and Al-Aqrabaniya (community) Osrin-Qabalan (3 sub-communities), Aqraba-Yanun-Duma (5 communities), the northern eastern slopes of Mount Ebal in the city of Nablus (community), Al-Jabal Al-Kabeer-Al-Bathan (community). Calculation of the extent of the distribution of the plant Based on the current study have shown that the area of occupancy (AOO) of the plant was estimated as 68 km2, while the estimated area of occurrence was 182.188 Km2. The study has shown that the plant became extinct from some of the sites in which it was previously recorded for reasons related to the destruction of the natural habitat of the Nablus Iris by turning it into agricultural land, urbanization and overgrazing. One site is in Tel village, Beit Eiba Nablus-Ameriya, Beit Dajan, and two sites in Yasid. However, the research team in the project could not verify the presence of the plant in some of the places where the plant was previously recorded for safety issues (sites were |

| Impact Description | Impact Summary |
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| | located close to settlements or military places) (Annex 1). |
| Assessment of the protection status of endangered endemic plants in Qeshdeh – Seris Reserve according to the criteria and categories of the International Union for Conservation of Nature | Different threats were recorded and documented to the threatened endemic plants in the studied area included: conversion of natural habitats into agricultural lands, urbanization, road construction, overgrazing, fires, pollution, and plant uprooting (Annex 4). It is worth noting that all Sawsan Nablus populations are distributed lands owned by the local community, none of these populations are in natural reserve, and this would increase the threat on the plant populations depending on the land uses by their owners. From our field survey, it was found that the overall population size of Sawsan Nablus is estimated to be less than 10,000 mature individuals in its distribution sites, and the population trend is declining. The plant is impacted by collection from the wild and individuals have declined by c.20% over the last ten years, and sub- populations are likely to have been lost. |
| Allocating two sites to protect the Iris of Nablus in its natural locations in Yaser Arafat Forest and Al-Bathan | The allocation of these sites will provide safe havens for Sawsan Nablus populations under threat. The two sites were designated for the protection of Sawsan Nablus, each of 0.1 hectar area. The first site is at Yaser Arafat Forest, and the other site is at Al-bathan – Talouza forest (Annex 12 and 13). These sites have some sort of protection through its affiliation to the Ministry of Agriculture. |
| Allocating three sites to protect Sawsan Nablus in their natural locations in the area surrounding the villages of Usarin, Yasid and Awarta | The establishment of protection sites in the surrounding villages of the plant distribution sites, will provide safe havens for plant populations under threat, and will increase the community awareness to help in plant population's conservation. |
| Allocating a protected area for the flower on an area of 500 m2 in the Qeshda-Seres site located within the study area | The literature survey conducted on the plant distribution has shown that the plant has been recorded in a site near Seris – Almikser reserve, however, in the current survey the plant was not recorded on the same site. Thus in this project in collaboration with MOA, and EQA we allocated a safe haven for the re-introduction and conservation of iris lortetii var samariae on and area of 0.1 hectar in the site allocated for the establishment of a botanic garden at Qeshdeh near Al-Mikser – Sedris reserve. |

| Impact Description | Impact Summary |
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| | The site was prepared and fenced for protection (Annex 14). |
| Determining eco-tourism paths (number 2) in a specific project area, using boards containing maps of the two paths | Two eco-tourism paths have been suggested to connect the distribution sites of the plant populations together, with the safe havens and conservation sites. . |

**4. Were there any unexpected impacts (positive or negative)?**

- It is worth mentioning, that many of the local community who are living in areas close to the plant populations distribution sites, didn't know or recognize the plant, and doesn't know about the importance of the plant as an endemic to Palestine, and to Nablus mountains mainly. The unexpected negative impact we are afraid of is that visiting the plant natural distribution sites and the newly established safe havens through eco-tourism tours will impose impact on the plant and would encourage people of uprooting the plant, similar to what had happened to the national flower of Palestine, Iris haynei. Were people during the eco-tours are uprooting the plants in order to plant them either in their gardens or selling the plants at their nurseries.
- *Iris Loterteii* populations have been studied in 7 localities (Yasid, Al-Bathan, Beit Dajan, Usarin, Aqraba, Qabalan, and Duma) in addition to Eibal Mountain in the city of Nablus. Some of the places where the species was recorded before were not accessible for the project team because they were either Israeli Military areas or located within Israeli settlements. Almost all Iris populations are located on private natural lands. None of these lands is located in a protected area. This is likely to impose direct threat on the plant due to habitat destruction as a result, for example, the conversion of these lands to agricultural or residential lands.
- the results of our scientific studies were used as reference in the spatial planning project in Palestine for the creation of a network of micro-reserves for the conservation of rare endemic plant species and the natural ecosystem units, by determining the land needs necessary to represent all units of ecosystems in nature reserves and protected areas by at least (17%) according to the Convention on Biological Diversity (CBD) (Aichi Biodiversity Targets, Category C, Target 11).

**PART II: Project Products/Deliverables**

**5. List each product/deliverable as stated in your approved proposal and describe the results for each of them:**

| # | Deliverable Description | Deliverable Update |
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| 1 | The presence of two sites for the protection of Sawsana Nablus, distributed in Al-Maksar-Seres and Al-Bathan, managed by the Protected Areas Department in cooperation with the local community | In coordination with EQA and the General Administration of Forests, Rangeland and Wildlife, and Agriculture directorates in Nablus, two sites were selected and prepared for the conservation of Sawsan Nablus using Quasi in situ conservation at sites managed and protected by the General |

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| | | Administration of Forests, Rangeland and Wildlife (MOA).<br>The two sites were selected at Yaser Arafat Forest, and Talouza –Al-Bathan Forest for the conservation, the area of each site is 1000 $m^2$. The two sites were fenced using a material supplied by Ministry of Agriculture in cooperation with Agriculture Directorate in Nablus (https://www.facebook.com/504336846270361/posts/3439775002726516/?d=n):<br><br>A. The forests of Talouza-Al-Badan, Al-Bathan area (1000 square meters) (Annex 13): the plants cultivated in the site were transferred from a nearby site at Al-Bathan which is under threat, the plant present in an area owned by a member of the local community who was planning to make some construction in the iris distribution site at Al-Bathan. BERC team transferred part of the seedlings to the conservation site of Talouza Al-Bathan. The cultivation of the plants at Al-Bathan Talouza conservation site was carried out with the participation of the local community in cooperation with Al-Bathan village council, and the participation of school students from Al-Bathan secondary school for boys and girls.( https://www.facebook.com/504336846270361/posts/3642752392428775/?d=n, https://www.facebook.com/504336846270361/posts/3642842452419769/?d=n.<br><br>https://www.facebook.com/504336846270361/posts/pfbid0qF4bwmsHQzndmndFLiLzG2ZprUHHXGDeaNc771NPsdt9ZoUHhVRc1uJ7HAwKCyKsl/<br><br>B. Quasi Conservation site at Yaser Arafat Forest in the Nablus area (Annex12). The plants cultivated plants were transferred from Eibal Mountain in the city of Nablus, in which the plants are under threat from different reasons including road construction, urbanization, household waste, fire, and over crazing.<br><br>At each site a sign was installed containing information related to the plant scientific and common names, its importance and status according |

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| | | to the IUCN criteria, implementing institution, partner institutions and supporting bodies. https://www.facebook.com/504336846270361/posts/pfbid022FWEPLQephjaLa7XpYA8AE6ChMyYGWsbCQzRUZaRbkw6LdUBdzLG12x8tLDJgmtjl/ https://www.facebook.com/504336846270361/posts/pfbid0P3WjbrV85d7RaD5SLP1LMEMXWLE1MN6GdU9X7i4sLwwUoAXNi1ubTHz67SCx2c34l/ |
| 2 | Allocating three sites for the protection of the Sawsan Nablus in the area outside the reserves in the villages of Usarin, Awarta and Yasid in their natural sites on the farmers' lands managed in partnership with the local community | In coordination with the local community three sites were selected and prepared for the conservation of Sawsan Nablus populations under threat. The first site was at the public garden of Aqraba Municipality, a 300 $m^2$ area of the public garden was allocated for the cultivation of Sawsan Nablus plants. The planting material was transferred from a nearby area in Aqraba where the plant populations were under threat due to land use and municipal waste pollution.<br>The second conservation site is located within the garden of the old heritage house of Abu Zaitoun family https://www.facebook.com/504336846270361/posts/pfbid0huFcPaA1hgkwNdL2jimbbShh29TervTC36KXXnVrzuQ2fitpYXGq7D4eDRdWr189l/ , located in the heart of the village of Yasid, to be a safe haven for the endemic and endangered Sawsan Nablus, in order to ensure the rescue of some plant populations existing in the village lands and which are under imminent threat, and in order to spread the culture of preserving them as one of the important Palestinian national natural heritages. https://www.facebook.com/BERC2017/photos/pcb.5024601064243894/5024596677577666/ https://www.facebook.com/BERC2017/photos/pcb.5025311754172825/5025256784178322/<br>The third site is at BERC Botanic Gardens in Til village by the establishment of the "Palestinian National Site for the Conservation of Royal Irises and Endemic Plants at BERC Botanic gardens (Annex 15): https://www.facebook.com/BERC2017/photos/pcb.5004210662949601/5004208542949813/ https://www.facebook.com/BERC2017/photos/pcb.5004210662949601/5004208542949813/ https://www.facebook.com/504336846270361/posts/pfbid0D8daX1ZV96g3NNNyVHyQuk1RKSeBSZvUkQ8P3M26KabnH3e68QNoKDx1QpQdYdrJl/ |

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| | | The importance of establishment of the national site besides conservation is the reintroduction of Sawsan Nablus to til village where it has been recorded in the literature, but extinct from the area because of the conversion of the land from natural to agricultural land. |
| 3 | A site dedicated to the protection of Sawsan Nablus in the Qeshda-Seres Reserve located within the study area | The site was selected at the Botanical Garden in the Western Qeshdah Basin, Southeast of Seres-Al Maksar Reserve, Qeshdah (1000 square meters) (Annex 14). The site was prepared, and fenced in cooperation with Eng. Hussam Taleeb- Director of Forest, Rangeland and Wildlife Department at the Ministry of Agriculture; agriculture directorate in Tubas, and Qeshdeh nursery. The cultivated Iris plants were transferred from Yasid site in an area under threat because of the establishment of Quarry in the area Photos. (Please see link for more information and photos https://www.facebook.com/504336846270361/posts/3458632627507420/?d=n, https://www.facebook.com/504336846270361/posts/3527153820655300/?d=n). A sign was installed in the conservation site containing information related to the plant scientific and common names, its importance and status according to the IUCN criteria, implementing institution, partner institutions and supporting bodies . the conservation site was opened officially on the 27th of march 2022 . https://www.facebook.com/504336846270361/posts/pfbid0253uAchhXJuyB9T4jSLspmYndUjRo9FAKcmudizXxGiHLseySmyL35xHVGd3zZwZXl/ |
| 4 | Knowing the specific plant needs necessary for conservation, identifying the threats to which it is exposed, proposing potential solutions with the participation of the local community, and integrating the protection of Sawsan Nablus into the current procedures in the management of reserves based on environmental survey and assessment | All Iris populations are located on private natural lands. None of these lands is located in protected areas or natural reserves. This is likely to impose direct threat on the plant due to habitat destruction as a result for example, the conversion of these lands to agricultural or residential lands. In addition, we identified the different threats that the plant is facing in its natural habitat including: over grazing, fires, pollution (Garbage and solid waste, air pollution), Minning and quarrying, urbanization (Residential development), road construction, shifting agriculture, up-rooting of the plant, Biological |

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| | | resource use (Gathering terrestrial plant for intentional use), Human intrusions and disturbance (Recreational activities, and work and other activities), Climate change and severe weather (Habitat Shifting and alteration, Drought), Natural system modification (land reclamation, Fire and fire suppression-increase in fire frequency/intensity) and others **(**Small population size) (Annex 4). |
| 5 | Maps showing the distribution of plant communities and determining the coordinates of its exact locations | Distribution maps of the plant populations were prepared (Annex 1). The GPS coordinates of Sawsan Nablus plants in Nablus mountains were recorded and uploaded at the Global Biodiversity Information Facility (GBIF) (https://www.gbif.org/occurrence/gallery?q=abuzaitoun) |
| 6 | Suggesting and developing plans for the management of nature reserves by reviewing and evaluating the practical procedures currently tiring in preserving nature reserves by the Ministry of Agriculture and proposing plans to manage the reserves (in cooperation with the Ministry of Agriculture and the Environmental Quality Authority) | To insure the conservation and protection of iris populations, its suggested to establish safe havens and a net of quasi insitu conservation sites, either inside or outside the nature reserves. This procedure will help to conserve the plant and increase its population and will help in the sustainability of the plant. |
| 7 | Inclusion of the protection of endemic plants in the proposed action plan for the management of reserves, based on an assessment of the protection status according to the standards of the IUCN | BERC suggested the inclusion of Sawsan Nablus distribution sites in addition to the Safe havens in the spatial planning of state of Palestine this can be done by the establishment of small conservation sites in the places where endangered plant species distributed and which were monitored by our team during the field work, including the white iris or the Nablus iris (an endemic plant only in the Nablus governorate globally, highly endangered globally), and other threatened native species, listed on the IUCN Red List. Suggested locations to be included in the spatial planning were: Yasid, Jabal Ebal (Nablus), Beit Dajan, Al-Bathan, Aqraba, Usarin, Qabalan, Salhab (Tubas), Yarza (Tubas). |
| 8 | A field guide to biodiversity in the study area documenting the state of plant biodiversity, especially the endemic plants and Iris of Nablus | A field guide entitled<br>"سيدة الأزهار "سوسنة نابلس<br>دليل حقلي لنباتات طبيعية من فلسطين<br><br>The guide included information on about 130plant species of the study area (Annex 6 A), and a |

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| | | research article entitled “Analysis of floristic composition and species diversity of vascular plants native to the State of Palestine (West Bank and Gaza Strip), was published at Biodiversity data Journal (Annex 6B).<br>The field included 130 Plant species with photos with their scientific and common names in Arabic and English. The guide will help the community members and nature lovers to be introduced to some of the Palestinian flora.<br>The article included an updated plant list of state of Palestine (West bank and Gaza Strip) including endemic and threatened plants.<br>Different leaflets and brochure were printed out these include the modified seed germination protocol, project activities, plant distribution sites, threats to the plant and biodiversity in the area<br>and information about the Quasi in situ conservation sites, and the national site for royal iris protection.<br>https://www.facebook.com/504336846270361/posts/pfbid0FxfXVRAyYw89K7tqLL2j9ERZX7UTqog8eCCJrprfoKFerF81jXCs6rJDt8wZkCwJl/. |
| 9 | Establishing a website and a page on social networking sites (Facebook, Instagram ...) in the name of the project, documenting all data related to the project, including goals, activities and results, with the aim of communicating with the local community and those interested in plant biodiversity, protecting and benefiting from it (https:/ /salamberc.wixsite.com/website?fbclid=IwAR241kjiED4w9990Z7N72mA0kxWAm0juhC5JEDa018x6qY_HEejhEvConf4) | The website was established and updated regularly with the project activities https://irislortetii-nablus.wixsite.com/berc for Arabic, and https://nablus-iris.my-free.website/ for English.<br>Project activities were uploaded on BERC Facebook. |

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| 10 | Crews from the local communities have acquired, through training, practical plant skills that enable them to participate in on-site survey and in the in-situ conservation operations | Several training workshops and seminars were carried out during the project implementation period. These workshops were either virtually due to the pandemic COVID 19, or in person:<br>- A seminar was conducted in the open space for school students Al-Bathan secondary school for Boys and girls). The seminar focused on the importance of plant biodiversity conservation with emphasis on Sawsan Nablus as an endemic endangered plant (6 women, 7 men).<br>- A virtual training workshop was carried out in coordination with Environmental Quality Authority and Ministry of Agriculture carried out a workshop on the "Conservation of Plant Biodiversity in Palestine with a Focus on Assessing the Conservation Status of Natural Plant Species According to IUCN Standards". The workshop was carried out on three days period (3-7 April, 2021). Please see links for workshop announcements (28 Women, 20 men):<br>https://www.facebook.com/504336846270361/posts/3825310514172961/<br>https://www.facebook.com/504336846270361/posts/3825954200775259/<br>https://www.facebook.com/504336846270361/posts/3832037603500252/<br>-BERC through the project manager participated at the 3rd Mediterranean Plant Conservation week strategies : from Science to practice, which was held at Chania, Greece from27 Sep 1 October 2021. We participated also through a presentation on the project activities and achievements<br>https://m.facebook.com/story.php?story_fbid=619875992706136&id=100040512214729<br>https://m.facebook.com/story.php?story_fbid=591289892231413&id=100040512214729<br>-Two training seminars were conducted for school students at Mohammed ben Zayed Al Maktous school for boys (20), and Til secondary school for girls (25). The seminars were organized in collaboration of Environment Quality Autharity office in Nablus, and School Health Committee in Nablus Directorate of Education. The |

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| | | Seminars included lectures on the importance of biodiversity with emphasis endemic endangered plants, and training on iris seed germination followed by an activity of planting the seedlings, which where produced at BERC, at the schools gardens and at the national conservation site for royal iris and endemic endangered plants.<br>- BERC in collaboration with Environment Quality Authority celebrated the World Environmental Day at the BERC Botanic gardens. The celebration was attended by about 100 people from different organizations and ministries including: GEF, MOA, Ministry of Local Government, Ministry of Economy, Directorate of Public Works, Directorate of Educations and schools, and local society. During the celebration, Minister of EQA announced BERC botanic gardens as a rich Biodiversity area that should be protected by Law, and an opening ceremony of the national conservation site of royal iris and other endangered plants, and a photo gallery for royal iris and other plants.<br>https://fb.watch/9_WOQR69gO/<br>https://www.facebook.com/504336846270361/posts/4016278848409459/<br>https://fb.watch/9_WQRFSZsC/<br>https://www.facebook.com/504336846270361/posts/4021007104603300/<br>https://www.facebook.com/504336846270361/posts/4021262101244467/<br>https://www.facebook.com/504336846270361/posts/4021942514509759/<br>https://fb.watch/9_WVTymWv4/<br>- A training workshop on iris seeds germination using the modified "Forced seed germination technique was carried out at BERC Labs. The trainees received an introduction on the royal irises including the constraints which prevent the germination of seeds in nature, followed by |

| | | |
|---|---|---|
| | | a video and practicing the germination of the seeds. The Training continued through a two month period in order to follow up with the development of the germinated seeds (8 women).<br>- A final workshop was carried out on the 28th of March 2022. The workshop was intended to present the project activities and deliverable to the local community (Annex 19). https://www.facebook.com/504336846270361/posts/pfbid036K51dGUMtEXWa4hVvDnTbsyYJ7V1pCmoYybXaXVEDqsNihkMGJVruE6Qj8Vs3E91l/ |
| 11 | Establishment of eco-touristic paths (number 2) in the name of Susanna Nablus 1 and 2 that pass in the areas of plant presence | Two eco-touristic paths have been suggested in order to connect the natural plant population sites with new safe havens and micro reserves (Annex 16):<br>**Eco-touristic Path 1:**<br>Eibal Mountain (Natural distribution site)…… The Forest of the Martyr Yasser Arafat (Quasi in situ conservation site)…… Asira……. Yasid (micro reserve at abu-Zaitoun family old house)…….. Yasid (Natural distribution site)….. Al-Mikser –Seris Nature Reserve…… Qeshdeh (Quasi in-situ conservation site)……Al-Bathan (Natural distribution site)…… Al-Bathan Talouza forest (Quasi in-situ conservation site).<br>**Eco-touristic Path 2:**<br>National Conservation site (BERC Botanic Gardens) …… Qabalan ((Natural distribution site) ….. Usarin ((Natural distribution site)) …. Aqrab ((Natural distribution site, Dawwa)…….. Aqraba public garden (micro reserve)……. Duma (Wadi Alzananir, Natural distribution site |
| 12 | High quality posters for Sawsan Nablus, used in public and official private places in the governorate | High quality posters of *Sawsan Nablus* and other plants in the study area have been produced (Annex 17). These posters have been used in a photo gallery at BERC-Til Botanic garden during BERC celebration of the World environmental day, in collaboration with EQA, MOA, and the local community. |

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| | | Also these posters were used in the photo gallery at the project final workshop which was held on the 28th of March 2022. |
| 13 | Publication of the results of the assessment on the Red List of Threatened Species of the International Union for Conservation of Nature | The study has been carried out in collaboration with Dr. Karim Omar (IUCN Red List Global Assessor) . A manuscript has been prepared, reviewed by Dr. Omar, and submitted to the IUCN Red List of Threatened Species for publication (Annex 3). |
| 14 | Establishment of a small reserve in a semi-preservation method by re-introducing the plant using iris seedlings produced from seeds | About 3000 $m^2$ land area at Til Village has been fenced and rehabilitated for the re-introduction of Sawsan Nablus to Till Village. 100 Seedlings produced from the germinated seeds at BERC labs were cultivated in the place. More seedlings will be transferred to the location on October 2022 (Annex18). |

**6. Please describe and submit any tools, products, or methodologies that resulted from this project or contributed to the results.**

- Mapping of Iris lortetii populations, and sharing the plant distribution data through the online Global Biodiversity Information facility (GBIF) (Annex 1).
- Creation of plant Safe Havens by the implementation of Quasi in situ conservation methodology for the establishment of conservation sites. Sites were created either in Governmental lands in collaboration of EQA and MOA or at private lands in collaboration with the local community (Annexes 2, 12, 13, 14, 15).
- Success in germination of Iris lortetii vara samariae and iris haynei by mofification of the forced germination protocol. Sharing the with other CEPF grantees through Mr Sharif Jbour. The modified protocol showed promising results in the germination of Iris lortetii var samaria and Iris haynei (Annex 5) .https://www.facebook.com/504336846270361/posts/3477340032303346/?d=n
- Survay of the plant flora in the project area (Nablus mountains) (Annex 11)
- Publication of the first annotated checklist on the flora of the State of Palestine: "Analysis of floristic composition and species diversity of vascular plants native to the State of Palestine (West Bank and Gaza Strip) https://bdj.pensoft.net/article/80427/" (Annex..)
- Assessment of the *Iris lortetii* var *samariae* status according to the IUCN red list criteria. Assessment report was submitted for the IUCN for publication (Annex 6B).
- Production of an illustrated field guide for 130 plant species. The guide included 130 plant species provided with some information on the plants (scientific name, English name, Arabic name, plant description, and flowering period), and plant photo (Annex 6A).
- Publication of the project booklet with information on the project objectives, activities, results, and outputs (Annex 20).
- Printout of Iris lortetii var samariae and other plants photos. These photos were presented in the photo gallery during the celebration of World Environmental day at BERC Botanic gardens, and during the project final workshop (Annex 17).

- Molecular characterization of royal iris in Palestine (Iris lortetii var samariae, I. Haynei, and iris atrofusca) (Annex 7).

**PART III: Lessons, Sustainability, Safeguards and Financing**

**Lessons Learned**

**7. Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building.**

The project design including different components was very fruitful. It was a real case study for setting priorities for the conservation of threatened endemic species, the assessment of plants status according to the IUCN criteria, the implementation of and conservation actions by the creation of plant shelters (plant safe havens) for the rescue and conservation of Sawsan Nablus, an endangered, strictly endemic Royal iris plant.

The capacity-building component was also crucial. The project was supposed to end in January 2022 but fortunately, CEPF allowed a three months extension. This last extension was very useful as we were able to gather the needed data for plant assessment according to IUCN criteria through intensive fieldwork.

The experience gained by the project team from BERC would be considered a valuable success worth replicating including the development of an improved plant propagation method by seeds of Iris lortetii var. samariae, and the introduction, for the first time in Palestine, of safe havens (plant shelters) for the conservation of threatened endemic plants using the quasi-in-situ method.

Also, the publication of annotated plant checklist and assessment of Iris lortetii var samariae according to the IUCN criteria for the red plant list has added to the capacity building of the project team in assessing plant species.

**Sustainability / Replication**

**8. Summarize the success or challenges in ensuring the project will be sustained or replicated, including any unplanned activities that are likely to result in increased sustainability or replicability.**

The Sawsan Nablus population were studied and documented. GPS locations of the plant populations were uploaded at the GBIF (for the first time by Palestinian scientists), this will enable other scientist to have access to the plant populations easily. New plant populations were recorded, while some of the populations which were recorded in the literature were extinct. We assessed the conservation status of the plant, and threats were recorded and documented.

Non of the plant population is located in natural reserves or protected areas, all are in private lands owned by the local community. The establishment of Quasi-in-situ conservation sites inside the nature reserves, and the establishment of safe havens on farmers lands will enable the rescue of plant populations under threat, and will ensure the sustainability of the project in conserving the plant.

The success in germinating iris seeds will ensure the availability of plant seedlings to be used for the creation of micro-reserves, or the reinforcement of plant populations in its natural locations.

## Safeguards

9. **If not listed as a separate Deliverable and described above, summarize the implementation of any required action related to social or environmental safeguards that your project may have triggered.**

## Additional Funding

10. **Provide details of any additional funding that you have secured to support this project.**

    a. **Total additional funding (US$)**

    b. **Type of funding**

Please provide a breakdown of additional funding (counterpart funding and in-kind) by source.

| Donor | Type of Funding | Amount |
|---|---|---|
| - | - | - |

## Additional Comments/Recommendations

11. **Use this space to provide any further comments or recommendations in relation to your project or CEPF.**

## PART IV: Impact at Portfolio and Global Level

## Contribution to Portfolio Indicators

12. In order to measure the results of CEPF investment strategy at the hotspot level, CEPF uses a set of Portfolio Indicators which are presented in the Ecosystem Profile of each hotspot. Please list these below and report on the project's contribution(s) to them.

| Indicator | Actual Numeric Contribution | Actual Contribution Description |
|---|---|---|
| 2.0 Number of hectares of KBAs under improved | 4 | Establishment of 4 community based fenced micro reserve in 4 sites to |

| | | |
|---|---|---|
| management (please indicate the KBA names in comments) | | protect Iris species from grazing threats |
| 3.0 Number of sites that gain official permanent protection status and number of hectares covered | 4 | Establishment of 4 community based fenced micro reserve |
| 4.2 Number of unprotected sites with improved management for plants | 4 | Establishment of 4 community based fenced micro reserve in 4 sites to protect Iris species from grazing threats |
| 4.5_Outcome 4_Number of locally endemic or highly threatened plant species for which improved knowledge is available | 5 | Data on distribution sites and abundance are available for endemic and highly threatened plants. A total number of 5 different endemic or highly threatened plant species have been conserved at safe havens and the national site for the conservation of royal iris and endemic endangered plants, the plants include: Agrostemma githago, Iris atrofusca, Iris germanica, Iris haynei, Iris loterteii |
| 4.6_Outcome 4_Number of KBAs for which information on plants is improved | 1 | Threatened species at the North Eastern Slopes Region (PSE10) have been surveyed |
| 4.7_Outcome 4_Number of young professionals with substantial experience in plant conservation gained | 25 | Young professionals gain expertise in plant survey, red listing of plants and germination of iris seeds. This has been achieved through workshops, and training by contribution to field survey and lab work. |

**Contribution to Global Indicators**

**Please report on all Global Indicators that pertain to your project.**

**13. Benefits to Individuals**

**13a. Number of men and women receiving structured training.**
Report on the number of men and women that have benefited from structured training due to your project, such as financial management, beekeeping, horticulture, farming, biological surveys, or how to conduct a patrol.

| # of men receiving structured training * | # of women receiving structured training * | Topic(s) of Training |
|---|---|---|
| 20 | 28 | Conservation of Plant Biodiversity in Palestine with a Focus on Assessing the Conservation Status of Natural Plant Species According to IUCN Standards |
| | 8 | Forced seed germination methodology |
| 2 | 4 | Surveying of plant diversity |
| 25 | 20 | Importance of plant diversity, plant conservation |
| 6 | 5 | Assessment *of iris lortetii var samariae* according to IUCN red list criteria |
| 48 | 51 | Total Number of trainees |

**Please do not count the same person more than once. For example, if 5 men received structured training in beekeeping, and 3 of these also received structured training in project management, the total number of men who benefited from structured training should be 5.*

**13b. Number of men and women receiving cash benefits.**
Report on the number of men and women that had an increase in income or cash (monetary) benefits due to your project from activities such as tourism, handicraft production, increased farm output, increased fishery output, medicinal plant harvest, or payment for conducting patrols.

| # of men receiving cash benefits* | # of women receiving cash benefits* | Description of Benefits |
|---|---|---|
| 2 | 5 | Community members participated is field survey and data collection |
| 3 | 1 | Casual labors for plant cultivation in farms |
| 5 | | Local people paid for the transportation of plants |
| 10 | 6 | Total |

**Please do not count the same person more than once. For example, if 5 men received cash benefits due to tourism, and 3 of these also received cash benefits from increased income due to handicrafts, the total number of men who received cash benefits should be 5.*

**14. Protected Areas**

**Number of hectares of protected areas created and/or expanded**

Report on the number of hectares of protected areas that have been created or expanded as a result of your 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 PA* | Country(s) | Original # of Hectares** | # of Hectares Newly Protected | Description | Longitude*** | Latitude*** |
|---|---|---|---|---|---|---|
| *Yasid Safe Haven* | *Palestine* | *0* | *1* | Establishment of community based micro reserve for the protection of the under threat iris species population | 32.296131 | 35.278114 |
| *Aqraba Safe Haven* | *Palestine* | *0* | *1* | Establishment of community based micro reserve for the protection of the under threat iris species population | *32.118583* | 35.342317 |
| *BERC-BG Safe Haven* | *Palestine* | *0* | *1* | Establishment of community based micro reserve for the protection of the under threat iris | *32.195419* | *35.204211* |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | species population | | |
| *Al-Tal Safe Haven* | *Palestine* | *0* | *1* | Establishment of community based micro reserve for the protection of the under threat iris species population | *32.196111* | *35.197778* |

** If possible please provide a shape file of the protected area to CEPF.*
*** Enter the original total size, excluding the results of your project. If the protected area was not existing before your project, then enter zero.*
**** Indicate the latitude and longitude of the center of the site, to the extent possible, or send a map or shapefile to CEPF. Give geographic coordinates in decimal degrees; latitudes in the Southern Hemisphere and longitudes in the Western Hemisphere should be denoted with a minus sign (example: Latitude 38.123456 Longitude: -77.123456). To obtain the latitude and longitude of your protected area, use googlemap, right click on the center of your protected area, and select "What's here?", and copy the latitude and longitude appearing in the popup window.*

**15. Key Biodiversity Area Management**
**Number of hectares of Key Biodiversity Areas (KBA) with improved management**
Report on the number of hectares in KBAs with improved management, where tangible results have been achieved to support conservation, as a result of your project. Examples of improved management include, but are not restricted to: increased patrolling, reduced intensity of snaring, invasive species eradication, reduced incidence of fire, and introduction of sustainable agricultural/fisheries practices. Do not record the entire area covered by the project - only record the number of hectares that have improved management.

If you have recorded part or all of a KBA as newly protected for the indicator entitled "protected areas", and you have also improved its management, you should record the relevant number of hectares for both this indicator and the "protected areas" indicator.

| Name of KBA | KBA Code from Ecosystem Profile | # of Hectares Improved * |
|---|---|---|
| North Eastern Slopes Region | *PSE10* | *4 ha* |
| | | |

** Do not count the same hectares more than once. For example, if 500 hectares were improved due to implementation of a fire management regime in the first year, and 200 of these same 500*

*hectares were improved due to invasive species removal in the second year, the total number of hectares with improved management would be 500.*

**16. Production landscapes**

**Number of hectares of production landscape with strengthened management of biodiversity**

Please report on the number of hectares of production landscapes with strengthened management of biodiversity, as a result of your project. A production landscape is defined as a landscape where commercial agriculture, forestry or natural product exploitation occurs.

- For an area to be considered as having "strengthened management of biodiversity," it can benefit from a wide range of interventions such as best practices and guidelines implemented, incentive schemes introduced, sites/products certified, and sustainable harvesting regulations introduced.
- Areas that are protected are not included under this indicator, because their hectares are counted elsewhere.
- A Production Landscape can include part or all of an unprotected KBA.

| Name of Production Landscape* | # of Hectares with Strengthened Management** | Latitude*** | Longitude*** | Description of Intervention |
|---|---|---|---|---|

*If the production landscape does not have a name, provide a brief descriptive name for the landscape.*

***Do not count the same hectares more than once. For example, if 500 hectares were strengthened due to certification in the first year, and 200 of these same 500 hectares were strengthened due to new harvesting regulations in the second year, the total number of hectares strengthened to date would be 500.*

**** Indicate the latitude and longitude of the center of the site, to the extent possible, or send a map or shapefile to CEPF. Give geographic coordinates in decimal degrees; latitudes in the Southern Hemisphere and longitudes in the Western Hemisphere should be denoted with a minus sign (example: Latitude 38.123456 Longitude: -77.123456). To obtain the latitude and longitude of your production landscape, use googlemap, right click on the center of your production landscape, and select "What's here?", and copy the latitude and longitude appearing in the popup window.*

**17. Benefits to Communities**

CEPF wants to record the non-cash benefits received by communities, which can differ to those received by individuals because the benefits are available to a group. CEPF also wants to record, to the extent possible, the number of people within each community who are benefiting. Please report on the characteristics of the communities, the type of benefits that have been received during the project, and the number of men/boys and women/girls from these communities that have benefited, as a result of your project. If exact numbers are not known, please provide an estimate.

**Please provide information for all communities that have benefited from project start to project completion.**

| Name of Community | Community Characteristics (mark with x) | | | | | | | Country of Community | Type of Benefit (mark with x) | | | | | | | | | # of Beneficiaries | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Small landowners | Subsistence economy | Indigenous/ ethnic peoples | Pastoralists / nomadic peoples | Recent migrants | Urban communities | Other* | | Increased access to clean water | Increased food security | Increased access to energy | Increased access to public services (e.g. health care, education) | Increased resilience to climate change | Improved land tenure | Improved recognition of traditional knowledge | Improved representation and decision-making in governance forums/structures | Improved access to ecosystem services | # of men and boys benefitting | # of women and girls benefitting |
| Aqraba Inhabitants | | | | | | X | Villagers and the schools in neighborhood | Palestine | | | | | | | | | X | 40 | 50 |
| Yasid Inhabitants | | | | | | X | Villagers and | Palestine | | | | | | | | | X | 20 | 30 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | the schools in neighborhood | | | | | | | | | | | | |
| Al-Bathan Inhabitants | | | | | | X | Villagers and the schools in neighborhood d | Palestine | | | | | | | | | X | 20 | 10 |
| Nablus Inhabitants | | | | | | | Citizens and Schools in neighborhood | Palestine | | | | | | | | | X | 60 | 100 |
| Til Inhabitants | | | | | | X | Villagers and the schools in neighborhood | Palestine | | | | | | | | | X | 40 | 40 |

*If you marked “Other” to describe the community characteristic, please explain: Palestinian rural and urban communities specially in the project area (Nablus mountains area).

**18. Policies, Laws and Regulations**

Report on policies, laws and regulations with conservation provisions that have been enacted or amended, as a result of your project. "Policies" pertain to statements of intent formally adopted or pursued by a government, including at sectoral or sub-national level. "Laws and regulations" pertain to official rules or orders, prescribed by authority. Any law, regulation, decree or order is eligible to be included.

**18a. Name, scope and topic of the policy, law or regulation that has been amended or enacted as a result of your project**

| No. | | Scope (mark with x) | | | Topic(s) addressed (mark with x) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name of Law, Policy or Regulation | Local | National | International | Agriculture | Climate | Ecosystem Management | Education | Energy | Fisheries | Forestry | Mining and Quarrying | Planning/Zoning | Pollution | Protected Areas | Species Protection | Tourism | Transportation | Wildlife Trade | Other* |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |

*** If you selected "other", please give a brief description of the main topics addressed by the policy, law or regulation.**

**18b. For each law, policy or regulation listed above, please provide the requested information in accordance with its assigned number.***

| No. | Country(s) | Date enacted/ amended MM/DD/YYYY | Expected impact | Action that you performed to achieve this change |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |

* These regulations are suggestions and will be discussed with EQA to be included in the Palestinian Environmental law.

**19. Biodiversity-friendly Practices**

**Number of companies that adopt biodiversity-friendly practices**

Please list any companies that have adopted biodiversity-friendly practices as a result of your project. While companies take various forms, for the purposes of CEPF, 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.

| No. | Name of Company | Description of biodiversity-friendly practice adopted during the project | Country(s) where the practice has been adopted by the company |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| … | | | |

**20. Networks & Partnerships**

**Number of networks and/or partnerships created and/or strengthened**

Report on any networks or partnerships between and among civil society groups and other sectors that you have created or strengthened as a result of your project. Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable. Examples of networks/partnerships include: an alliance of fisherfolk to promote sustainable fisheries practices, a network of environmental journalists, a partnership between one or more NGOs with one or more private sector partners to improve biodiversity management on private lands, or a working group focusing on reptile conservation.

Do not list the partnerships you formed with others to implement this project, unless these partnerships will continue after your project ends.

| No. | Name of Network / Partnership | Year established | Did your project establish this Network/ Partnership? Y/N | Country(s) covered | Purpose |
|---|---|---|---|---|---|
| 1 | Ministry of Agriculture, MOA (General Administration of Forests, Rangeland and Wildlife) | 2020 | Y | Palestine | Conserve iris population and other endemic endangered plants by allocating safe havens or extending the established safe havens in Governmental lands under their responsibility. |
| 2 | Al-Bathan Secondary School | 2020 | Y | Palestine | Partners in the establishment of and follow up on safe haven for iris lortetii in the school garden |

**21. Sustainable Financing Mechanism**

List any functioning sustainable financing mechanisms created or supported by your project. 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 service (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation. To be included, a mechanism must be delivering funds for conservation.

**21a. Details about the mechanism**

| No. | Name of Financing Mechanism | Purpose of the Mechanism* | Date of Establishment** | Description*** | Countries |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |

**Please provide a succinct description of the mission of the mechanism.*
***Please indicate when the sustainable financing mechanism was officially created. If you do not know the exact date, provide a best estimate.*
****Description, such as trust fund, endowment, PES scheme, incentive scheme, etc.*

**21b. Performance of the mechanism**
For each Financing Mechanism listed previously, please provide the requested information in accordance with its assigned number.

| NO. | Project intervention (mark with x) | | | Has the mechanism disbursed funds to conservation projects? |
|---|---|---|---|---|
| | Created a mechanism | Supported an existing mechanism | Created and supported a new mechanism | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |

**22. Red List Species**

If the project included direct conservation interventions that benefited globally threatened species (CR, EN, VU), as per the IUCN Red List, add the species below.

Examples of interventions include: preparation or implementation of a conservation action plan, captive breeding programs, species habitat protection, species monitoring, patrolling to halt wildlife trafficking, and removal of invasive species.

| Genus | Species | Common Name (Eng) | Status (VU, EN, CR or | Intervention | Population Trend at Site |
|---|---|---|---|---|---|

| | | | Extinct in the Wild) | | (increasing, decreasing, stable or unknown) |
|---|---|---|---|---|---|
| Iris | Lortetii var. samariae | Sawsan Nablus | EN | In order to conserve the plant populations BERc team in collaboration of EQA, MOA and the local community established several safe havens (3 located in Governmental lands monitored by MOA, 3 safe havens in collaboration with the local community (Yasid, Aqraba and Til), and in a conservation site for royal irises and other endemic threatened plants at BERC Botanic Gardens in Til.<br>BERC team also was successful in germinating iris seeds (>70% germination rate), this will help in reinforcement of the plant populations either in safe havens or in its natural distribution sites. | Decreasing |
| Iris | haynei | Faqoua iris | VU | Germination of plant seeds at BERC labs, and conservation of the plant at the conservation site for royal irises and other endemic threatened plants at BERC Botanic Gardens in Til.<br>Recording the plant in new places, and records were uploaded at the GBIF | Decreasing |
| | | | | | |

**Part V. Information Sharing and CEPF Policy**

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final completion and impact reports are made available on our Web site, www.cepf.net, and publicized in our e-newsletter and other communications.

Provide the contact details of your organization (organization name and generic email address) so that interested parties can request further information about your project.

**Organization Name: Biodiversity & Environmental Research Center-BERC**
**Generic email address: berctil@yahoo.com**