

Small Grants – Project Completion and Impact Report

A. Administrative components

Organization Legal Name	Palestine Wildlife Society (PWLS)		
Project Title	Towards the sustainability of the National Flower of Palestine (<i>Iris haynei</i>) trough in situ scientific garden		
Grant Number	CEPF-110673		
Date of Report	June 2021		

CEPF Hotspot: Mediterranean Basin Biodiversity Hotspot

Strategic Direction: SD4: Strengthen the engagement of civil society to support the conservation of plants that are critically endangered or have highly restricted ranges

Grant Amount: US\$ 19,380

Project Dates: 1st April 2020 – 31st May 2021

PART I: Overview

Implementation Partners:

No.	Name of Partner	Name of Partner involvement in the project	
1	The Environmental Quality Authority	Supervise project implementation and facilitate governmental support	
2	Arab American University (Palestine)	Cooperation in the field of the scientific research for the classification of the iris	
3	Najah national University (Palestine)	Cooperation in the field of the scientific research for the classification of the iris	
Saint Joseph University 5 (Lebanon)		Cooperation in the field of the scientific research for the classification of the iris	
6	The Royal Society for the Conservation of Nature (RSCN-Jordan)	Collaboration in the field of the scientific research for the classification of the iris	
7	The Faqou'a Villager Council- Palestine	Provision of project support to activities including the awareness campaigns, research and meeting of the project team.	

Summary of the overall results/impact

The beautiful Iris haynei (the Faqou'a Iris) is the national flower of Palestine. It has received little attention in the past in terms of scientific research and conservation. Palestine Wildlife Society (PWLS) efforts supported by CEPF and BirdLife International in its capacity as the regional implementation team, have contributed to putting this globally threatened iris on the national conservation agenda. The Faqou'a Iris became well protected in its habitat by its surrounding communities, but also created a hub for tourists' attraction and is now contributing in the human welfare of its community.

The projects resulted in the following:

- 1. **Increased environmental awareness**: Environmental awareness increased in the targeted area especially in the Merj ben Amer area (Jenin District) among students from schools, Universities, public libraries and youth groups around 100 people.
- 2. **Risk reduction:** Main risks of destroying the iris habitat and picking the Irises by farmers as a result of local agricultural practices reduced.
- 3. **Tourism attraction**: PWLS collaborated with the local community to accompany local tourist groups visiting the region during the annual iris event celebrations. 3 trails were identified for the canalization of tourist. Tourists were informed about the importance of iris conservation as a rare flower in the area, and as a national icon being the national flower.
- 4. **Human welfare being observed and economic condition improved:** Local handcraft products and local food promoted throughout the year. In addition to local tourism, which increased as a result of the project, the project contributed to the economic stability in the area.
- 5. Data on iris haynei improved: Utilizing the Geographical Information System (GIS), PWLS and EQA team of experts collected data on the Iris localities, threats and flowering and completed the transfer of this data to the GIS and associated maps.

Actual Project Progress:

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

Impact Description	Impact summary	
The protection status of the national flower of Palestine (Sawsan Faqou'a) improved	Protection efforts of the endangered iris species by P implemented in cooperation with the local community Palestinian Environmental Quality Authority (EQA). These ef continued and are still in progress. However, protection req extra attention, experts, and thoroughly planned actions.	
A significant number of Palestinian students trained as botanists at Palestinian universities and other academic institutions	Number of students interested in botany increased and are capable to observe, identify, and survey the Irises in the field. PWLS still aim to increase this number every year.	
The Faqua'a Iris analyzed and reintroduced in its natural habitat	The iris reintroduced to its natural habitat in the Faqou'a Mountains and efforts by PWLS were made to plant seeds,	

	monitor the flower status, and determine the percentage of seed germination in its natural state.
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Planned Short-term Impacts - 1 to 3 years

Impact Description	Impact summary		
Study of the iris status finalized. Field study of iris in the Faqou'a mountains (Faqou`a and Jalboun regions) organized and IRIS Habitat area where Faqua Iris regenerates became well known	Intensive field surveys for iris made during flowering season and knowledge gaps related to iris haynei range, distribution, population trend and main threats were addressed.		
(Short term Impact (1)			
Threats to the iris species identified (Short term Impact (2)	This was the most critical and challenging aspect of the project. PWLS assessed the threats that the irises faced in its natural state.		
The genetic characteristics of 30 iris samples analyzed (short term Impact3)	PWLS built a map of iris distribution in the project area based on the region or a practical and scientific study of iris species. Analysis of plant genetics was made in terms of types, colors, size, and other factors in the laboratories of local institutions.		
Training program of botany for 10 Palestinian students conducted (short term Impact4)	A number of 15 students were trained on botanical principles. The skills they received will be further utilized in future similar activities.		
DNA Analysis to identify if there are new types of Irises. (short term Impact5)	DNA analysis is an ongoing activity with partners in Lebanon and Jordan beyond the scope of the project. (The DNA analysis cost is much higher than expected).		
Replanting of iris seeds at the Faqua Garden (short term Impact5)	The germinated seeds planted in the Faqu'a garden in cooperation between PWLS, the village council, and the trained students. The Irises bloomed with a good quantity in March- April 2021.		

Success and / or challenges of the project toward achieving its short-term and long-term impacts

1- Success

- a- Participation of effective institutions such as the Environmental Quality Authority (EQA) and local universities, and the regional cooperation with Jordan and Lebanon has given a good initial result that can be raised to a better level in the near future, to study the iris and give the public and university students an opportunity for better participation.
- b- The project contributed to the promotion of the Faqou'a Iris flower as the expression of the national flower of the State of Palestine since its only habitat is in Faqou'a area in Palestine. The project provided significant information about the Faqou'a Iris flower, its condition and approximate numbers, and its natural and real status in the region.
- c- Faqou'a village council donated 4.5 dunams of land for establishing a new scientific garden for the iris to be utilized by PWLS as a sustainability for this project in similar or a continuation of activities.

2- Challenges

- a- The COVID-19 pandemic had its impact on the project as the universities and Palestinian institutions were temporarily closed. Travel and access to the project area form other districts or cities became difficult. However, PWLS made huge efforts to implement the project activities as scheduled,
- b- The lack of information about scientific research at the Palestinian level in the field of replanting seeds or DNA analysis constituted a challenge, but PWLS cooperated with specialized experts in institutions and universities in Palestine and the region to learn about their experiences in similar Iris DNA analysis.

Unexpected impacts (positive or negative)

- 1. The project attracted the local universities attention and interest in the Faqou'a Iris and encouraged their students to complete their diploma and master's thesis about the Iris.
- 2. The Environmental Quality Authority's (EQA) worked on initiating a legislation to protect irises and on making plans for its protection,

PART II: Project results and tools

Project outputs/results

Number (from logical framework)	Expected outputs/result (from logical framework)	Indicator (from logical framework)	Achievement (end of project)
1	Survey of the Iris population in the project area (Activities 1.1, 1.2, 1.3, 1.4, 1.5, 1.6)	An approximate number of the iris in the project area through the selection of five study areas, with a width of 100 meters by 100 meters using transect methodology	Data and map produced showing the distribution of the Iris in the targeted area
2	Training of university students on the concepts of environmental scientific survey of plant diversity finalized Activities(2.1, 2.2, 2.3, 2.4)	Training of fifty students on the concepts of plant taxonomy	1. About 80 students trained from Al-Najah, Bethlehem and the Arab American Universities on wildlife survey especially botanical survey. They participate in the baseline survey (based on 3 times). on the

			 importance of the Iris protection. PWLS introduced the concepts of nature protection and the importance of biodiversity in the Palestinian nature. 2. University students were trained on botany 3. A Master's Degree student from AI Najah University made an applied research on irises of the region since September 2020 as part of his master thesis. 4. School students from the area aged 15-17 years were involved in several activities, such as field trips to the Iris sites. These activities gave them the opportunity to photograph and draw nature
			photograph and draw nature scenes at the site. A number of 50 students participated in these activities. The students were from the villages of Jalboun and Faqou'a, in addition to members from the Faqou'a village council library.
3	Iris seeds in five different locations / home gardens and Iris Faqoua's garden replanted Activity (3.1, 3.2)	Five home gardens in which iris is planted, including the garden of Faqou'a iris	Iris flower replanted in five different locations. Two areas of the village were cultivated, the first in the garden of the iris and the second in the southern region of the village by local university students. A number of 3 home gardens are now planted with Faqua Iris.
4	Analysis of DNA for 30 iris samples conducted Activity 1.2	DNA results	PWLS used the protocol for seed cultivation and DNA extraction in cooperation with the Saint Joseph University in Lebanon and the Royal Society for the Conservation of Nature in Jordan to test 30 Iris samples. The costs of conducting the initial tests for DNA for the iris were more than envisaged due to the lack of experience.

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

Component		Deliverable		
#	Description	Sub- # Description		Results for Deliverable
1	Field studies	Activity 1.1, 1.2	Survey the numbers of iris species in the Faqou'a Mountains (Jalboun and Faqou'a) and analyze thirty samples of genetic characteristics.	In collaboration with the Palestinian eco forum and Palestinian universities, PWLS conducted surveys of the irises in the project area. A number of 30 samples were collected but a complete DNA analysis was not possible due to unexpected huge lab costs and lack of budget to cover these costs. But efforts are still ongoing with Saint Joseph University in Lebanon.
2	Understandings reached with Al Najah and Jenin American universities to increase the capacity and train number of botanists	Activity 2.1	Educate university students about environmental concepts and plant biodiversity in order to prepare them to become botanists.	PWLS trained fifteen botanists who helped and continued to assist in safeguarding and conserving the Faqou'a iris in its original habitat in Palestine.
3	Cooperation and Understandings reached with the Palestinian National and local authorities regarding the Iris urgent protection measures Public awareness Campaign	Activity 2.3, 2.4	Reintroduction of the iris plants in the project area. Public awareness campaign conducted through community meetings at Faqou'a village Council in cooperation with the Local authority Mayor and staff in addition to Media	Protection measures were taken and PWLS effectively spread the iris blossoms in five different sites, including the Faqou'a garden, and discovered the growing season for the iris. Awareness Campaign conducted and finalized

			PWLS used and	
4	Regional protocols: Building on the experiences of regional institutions	Activity 1.2	applied the protocol for seed cultivation and DNA extraction prepared by Saint Joseph University in Lebanon and RSCN.	PWLS tested the applicability and applied the protocol for the seeds germination process.

PART III: Lessons, Sustainability, Safeguards and Financing

Lessons Learned

- 1. The field environmental assessment of the vegetative clusters, the number of flowers, and seeds, is a complex operation that will take few years to complete in order to determine the true state of the iris.
- 2. The process of involving students in the usual manner in a field environmental survey process: In the future, a significant number of students should be pre-qualified for practical / field / scientific studies in order to conduct a proper large study and not rely on a small group of researchers.
- 3. The process of engaging the local community should be more integrated with the implementation of the project activities as farmers have implementation a direct impact on the iris, which was well observed during the project implementation period.
- 4. The locals in the village and in the region should also participate and be integrated into the events, celebrations, and activities. A field committee consisting of several local institutions in addition to the local community should be at the head of these activities to increase the public understanding and need to protect iris, where their participation in the implementation of the iris protection activities is a vital element.
- 5. Focusing on the youth training to become tour guides within the region is important. Sharing of knowledge and experiences with school and university students who live in the village or region is an important factor in order to increase environmental awareness among the local public, community members and visitors.

Sustainability

PWLS has made huge efforts to sustain the project and to build a scientific research Center in Faqou'a village. The center will be vital for the sustainability of the project activities in the future and for the conservation and protection of the Faqu'a Iris. The center will play a major role in further data collection, surveys and researches, in addition, the center will be used as an onsite training venue for students and interested groups.

The cooperation between PWLS and the National and Local Authorities is continuing and shall continue to ensure that the Faqu'a Iris is well protected, and its quantities increased in its original habitat.

Additional Funding

Additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of CEPF investment

- a. Total additional funding (US\$): US\$50,000
- b. Types of funding

Donor	Type of Funding*	Amount in US\$	Notes
Faqu'a Village Council	In kind contribution	<mark>\$50,000</mark>	1 ha, Land Contribution: To build the Iris Scientific Study center

Additional Comments/Recommendations

- 1- To increase the accuracy of the investigation of the environmental survey about the Iris flower, It is recommended to intensify the planning and fundraising efforts to build and equip the Iris Scientific Center. It is recommended to continue the cooperation process for sharing experiences of the regional institutions such as Saint Joseph University, and the Royal Society for the Protection of Nature.
- 2- Submitting all the current results of the project to the official authorities such as Bird Life International and IUCN and the other Nature Conservation organizations in the world.



The seedling method

PART IV: Impact at Portfolio and Global Level

This is the first time for Palestine to generate and have their own iris data because Israel has had their own botanists for some time. As we successfully shifted reliance from Israel to Palestine, thus, PWLS are considering recommendation to Bird Life and IUCN to update their data with our own records and surveys.

Ensure that the information provided pertains to the entire project, from start date to project end date.

Contribution to Portfolio Indicators

Indicator	Narrative	
4.1 Number of threatened plant species seeing status improved	The status of iris haynei improved at the site level through improved conservation measures and mitigating threats to the species in addition to engagement of local communities (mainly farmers) in reduce threats to iris	
4.2 Number of unprotected sites with improved management for plants	A new scientific botanical garden with an area of 4.5 dunums for the iris haynei established	
4.5 Number of locally endemic or highly threatened plant species for which improved knowledge is available	Knowledge about iris haynei status at the site, population trend and threats improved through the implementation of the project	
4.7 Number of young professionals with substantial experience in plant conservation gained .	3 young biologists (2 men and 1 women) gained significant knowledge on plant taxonomy and conservation.	

Contribution to Global Indicators

Key Biodiversity Area Management

Name of KBA	# of Hectares with strengthened management *	Is the KBA Not protected, Partially protected or Fully protected? Please select one: NP/PP/FP
None	None	None

* 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.

Protected Areas

15a. 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 CEPF investment.

Name of PA*	Country(s)	# of Hectares	Year of legal declaration or expansion	Longitude**	Latitude**	

* If possible please provide a shape file of the protected area to CEPF.

** 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).

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ملاحظات سرد مب				

- a- Using the observation.org for the recorded of the iris in the target area (above
- b- The data of the iris as transferee it from observation to GIS (Vegetation, Flowering and Fruit and all) by EQA



15b. Protected area management

WDPA ID	PA Official Name	Date of METT*	METT Total Score
None	None	None	None

Production landscape

Please report on the number of hectares of production landscapes with strengthened management of biodiversity, as a result of CEPF investment. A production landscape is defined as a landscape where agriculture, forestry or natural product exploitation occurs. Production landscapes may include KBAs, and therefore hectares counted under the indicator entitled "KBA Management" may also be counted here. Examples of interventions include: best practices and guidelines implemented, incentive schemes introduced, sites/products certified and sustainable harvesting regulations introduced.



Number of hectares of production landscapes with strengthened management of biodiversity.

Name of Production Landscape*	# of Hectares**	Latitude***	Longitude***	Description of Intervention

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

17. Beneficiaries

17a. Number of men and women receiving structured training.

# of men receiving structured training *	# of women receiving structured training *					
23 trained in wildlife survey and botanical survey	54 trained in wildlife survey and botanical survey					
2 :DNA analysis	1 :DNA analysis					



17b. Number of men and women receiving cash benefits.

# of men receiving cash benefits*	# of women receiving cash benefits*

PWLS activities in the media:

- Imad Atrash lecture video post 6th December, 2020 <u>https://www.facebook.com/105949018040103/videos/295105101890402</u>
- Imad Atrash lecture video post 9th December, 2020 <u>https://www.facebook.com/105949018040103/videos/2706487653014460</u>
- Imad Atrash lecture video post 18th December, 2020 <u>https://www.facebook.com/105949018040103/videos/112020470687387</u>
- CEPF/Bird Life international video post 3rd January, 2021 <u>https://www.facebook.com/105949018040103/videos/825173558040974</u>
- CEPF photo contest 3rd May, 2021 <u>https://www.cepf.net/stories/announcing-cepfs-2021-photo-contest-</u> <u>winners?fbclid=IwAR1HFWIkN82dyMuwJ1i53I7uUZUnbkM_1eMb-ayH50umOa_3-IDIA_0rkZA</u>
- This week in Palestine "The national flower of Palestine, Faqqua Iris" 4th April, 2021 <u>https://thisweekinpalestine.com/faqqua-</u> <u>iris/?fbclid=IwAR3GK6MIgF5qk5kf8SMoJ0TNZBCm0baFHaSoFfeuz4la2HeO6Pe7Jkfsvf4</u>
- PBC video, Facebook post 3rd March, 2021 <u>https://www.facebook.com/105949018040103/videos/261997825378379</u>

8. Benefits to Communities

18a. Please provide information for all communities that have benefited from project start to project completion.

Name of Community		Community Characteristics (mark with x)				Type of Benefit (mark with x)									# of Beneficiaries			
	A	В	С	D	E	F	G	A	В	С	D	E	F	G	Η	1	# of men and boys benefitting	# of women and girls benefitting
Faqou'a Village Community	x					x					x		x	x		x		

*If you marked "Other" to describe the community characteristic, please explain:

Letters indications in the table below:

<u>Community Characteristics</u>: (A) Subsistence economy, (B) Small landowners, (C) Indigenous/ ethnic peoples, (D) Pastoralists / nomadic peoples, (E) Recent migrants, (F) Urban communities, (G) Other

<u>Type of Benefit</u>: (A) Increased access to clean water, (B) Increased food security, (C) Increased access to energy, (D) Increased access to public services (e.g. health care, education), (E) Increased resilience to climate change, (F) Improved land tenure, (G) Improved recognition of traditional knowledge, (H) Improved representation and decision-making in governance forums/structures, (I) Improved access to ecosystem services

Geolocation of each community

Indicate the latitude and longitude of the center of the community, to the extent possible, or upload a map or shapefile. 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).

Name of Community	Latitude	Longitude			
Faqou'a Village Community	32°29'21.83"N	35°23'56.27"E			
Raba	32°23'3.00"N	35°22'31.81"E			



Data Base Observation of the *iris haynei* (updated) i:

- e- https://palestine.observation.org/soort/view/211130?from=2014-06-07&to=2021-06-07
- f- see attached document (iris 5-5-2021)

19. Policies, Laws and Regulations

No change in the number of legally binding laws, regulations, and policies with conservation provisions that have been enacted or amended, as a result of CEPF investment. "Laws and regulations" pertain to official rules or orders, prescribed by authority. Any law, regulation, decree or order is eligible to be included. "Policies" that are adopted or pursued by a government, including a sector or faction of government, are eligible. 19a. 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)			rk with (mark with x)														
	Name of Law, Policy or Regulation	A	В	C	A	В	C	D	E	F	G	H	I	J	К	L	Μ	Ν	0
1	The protection of the national flower of State of Palestine		х													x			

Scope: (A) Local, (B) National, (E) Regional/International

<u>Topic(s) addressed:</u> (A) Agriculture, (B) Climate, (C) Ecosystem Management, (D) Education, (E) Energy, (F) Fisheries, (G) Forestry, (H) Mining and Quarrying, (I) Planning/Zoning, (J) Pollution, (K) Protected Areas, (L) Species Protection, (M) Tourism, (N) Transportation, (O) Wildlife Trade.

19b. 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				

20. Sustainable Financing Mechanism: not yet specified.

20a. Details about the mechanism

NO.	Name of financing mechanism	Purpose of the mechanism*	Date of Establishment**	Description***	Countries
1					

20b. Performance of the mechanism

NO.	Project intervention*	\$ Amount disbursed to conservation projects **	Period under Review (MM/YYYY -MM/YYYY)***		
1	None	None	None		

21. Biodiversity-friendly Practices

Number of companies that adopt biodiversity-friendly practices

No.	Name of company	Description of biodiversity-friendly practice adopted during the project
1	None	None

22. Networks & Partnerships

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

No.	Name of Network	Name of Partnership	Year established	Did your project establish this Network/ Partnership? Y/N	Country(s) covered	Purpose
1	Eco Pal Forum	 University of Al- Quds University of AlNajah University University of Arab American Palestinian Academy for Science and technology 	2018	No, these partners are the same for the new project 2018	Palestine	Implement Nature Conservation activities in Palestine



23. Gender

If you have been requested to submit a Gender Tracking Tool (GTT), please follow the instructions provided in the Excel GTT template. If you have not been requested to submit a GTT, please go directly to Part V.

Should you want to know more about CEPF Gender Policy, please click here.

Download the GTT template which can be found on <u>this page</u> and then work with your team to fill it out. Please do not forget to submit the completed GTT together with this report.

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 project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

Full contact details below:

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Final iris workshop in Jenin photo





