



## Darwin Initiative Main and Post Project Annual Report

Project reference	25-030
Project title	Biodiversity Conservation and Community Development in Al-Makhroul Valley in Bethlehem, Palestine.
Country/ies	Palestine
Lead organisation	Bethlehem University - Palestine Institute of Biodiversity and Sustainability/Palestine Museum of Natural History (BU-PIBS/PMNH).
Partner institution(s)	Institute for Community Partnership (ICP-BU); Byspokes Sustainable Community Development.
Darwin Grant value	£ 287,343
Start/end dates of project	01 September 2018 - 31 March 2021
Reporting period and number	1 April 2019 – 31 March 2020 Annual Report 2
Project Leader name	Professor Mazin Qumsiyeh
Project website/blog/social media	<a href="http://almakhroul.palestinenature.org/">http://almakhroul.palestinenature.org/</a> <a href="http://www.facebook.com/Palestine-Museum-of-Natural-History-1454309858180882">http://www.facebook.com/Palestine-Museum-of-Natural-History-1454309858180882</a>
Report author(s) and date	Prof. Mazin Qumsiyeh/ Abdelsalam Aljanazreh/ Summer Shaheen/ Manal Qassis, 15/05/2020

### 1. Project summary

This project is a collaborative one to conserve biodiversity in Al-Makhroul Valley of Bethlehem (Palestine) benefitting the local communities through sustainable use of ecosystem services, including: (a) promoting agriculture/green practices, (b) developing ecotourism, and (c) reducing human impact via environmental awareness and education programs while promoting sustainable lifestyles. Project outputs delivered will focus on biodiversity conservation, reviving traditional farming, eco-tourism enhancement, and capacity building. All activities were supported with project committees' consultation, gender inclusion, media coverage, and evaluation. Sustaining human and nature in a threatened area is the vision of this project. We work in the targeted area Al-Makhroul Valley, an area recognized as a UNESCO World Heritage Site (WHS see map Annex 17). The area's ecosystems and marginalized human communities are facing complicated threats from colonization to urbanization to pollution to climate change. To achieve our vision, the project aimed to do detailed studies of local fauna and flora, develop management plans, and then engage in capacity building for farmers and other locals in four communities surrounding the Valley. The project has created a positive scheme for at least 80 farmers in four villages, indirectly benefiting more than 500 individuals, relatively exposed to direct support or awareness activities. The project expanded beyond its outcomes to reach for example in its influence on Ministries of Agriculture and Tourism, and the Environmental Quality Authority. The developed biodiversity conservation plan in this second year of the project was adopted by the Palestinian government, and annexed to a larger management plan for the WHS. Even as the Coronavirus pandemic affected us like other countries, the project team is working hard and flexibly (you mean flexibility?) (from implementer and funder) will ensure delivery of all outputs.

### 2. Project partnerships

The project is implemented by three partners. BU-PIBS/PMNH is the lead organisation with two partners; ICP-BU (Palestine) and Byspokes (UK) and with support from Pioneer Consultancy

Centre for Sustainable Development (PCC, for the agricultural inputs.) The partners have developed mutual understanding to cooperate and implement the project based on mutual consent. The partners participated in all stages of the project cycle since the development of the proposal. Furthermore, the partners participate in the project steering committee that meets on a periodic basis to oversee the project, share ideas, and respond to local needs. The project management developed partnerships with key relevant local authorities (the municipal council and village councils of Beit Jala, Al-Walajah, Husan, Battir) and national government bodies (Environmental Quality Authority, Ministry of Tourism, and Ministry of Agriculture). In addition, NGOs in the four communities, as well as other NGOs whose work intersects with the project (e.g. Agriculture Development Society-PARC, Union of Agricultural Works Committees-UAWC) were involved. All actions related to project were developed via stakeholder meetings both in the design stage (before proposal submission) and during implementation stage. After focus group meetings, committees were set-up including four agricultural committees (in each community composed of key farmers, cooperative heads, village council members, etc.) and committees for education (composed of educational experts from BU-PIBS/PMNH, representatives of Ministry of Education), biodiversity (includes biodiversity experts in different areas like plants, birds, mammals etc, and representatives of the Environmental Quality Authority), and tourism (Raed Saadeh, tour operators, representatives of the four communities) were created. The four agriculture committees helped select farmers. The project's management team thus adopted a bottom up approach to motivate farmers and beneficiaries of the project to decide upon their needs and the changes they wanted to protect the valley and its people. The project has created a positive outcome for 80 farmers in four marginalized communities via a work that accelerated in the second year with them and benefitted hundreds of students and other community members. All those are also considered stakeholders and partners. We learned to work with diverse people with different backgrounds, expectations, needs, ages, genders, etc. We noted significant improvement in communication from first to second year. For example as farmers and local authorities dealt with a consistent person for agricultural issues (Ms. Summer Shaheen), they formed good relations and reached high level of trust with Ms. Shaheen not just in areas of agriculture but in other areas of their lives (including sustainable household operations and management). Example of active collaborative work actions: PCC <https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/PCC-Contract-Year-two.pdf> and MOU with Byspokes and others <https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Partnership-documents.pdf> Samples of meeting minutes in Annex 11 and also the agriculture report Annex 13 (<http://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Annex-13-Agriculture.pdf> )

### **3. Project progress**

#### **3.1 Progress in carrying out project Activities**

Progress in the second year built on the progress reported earlier for the first year in the areas of this work: promotion of biodiversity and ensuring community benefit from conservation of biodiversity via organic agriculture and promotion of tourism (eco- and agricultural). Empowering communities while helping to preserve a rich biodiversity area. Here is a brief about the progress of the activities as per the logical framework:

#### **Activities under Output 1**

**Activity 1.1 & 1.2** Completed and reported in the previous reporting period. However, we provided the Year One Annual Report and the Desktop Studies again in Annex 4 and 5 for reference.

**Activities 1.3 & 1.4** Biodiversity inventory and baseline evaluations were started during the previous reporting period and has now successfully and timely completed. Our work included geologic, faunistic, floristic and ecosystem studies. The inventory was carried out by a ten-member team using a systematic process for surveying biodiversity components of fauna and flora, in addition to key habitats described and emphasized using maps and tables of data. The team was composed of five museum staff specialist in different areas (Prof. Mazin Qumsiyeh (mammals), Dr. Taleb Alharithi (geology), Mr. Elias Handal (insects & reptiles), Mr. Mohammad Najajreh (insects), and Mr. Mohammad Abusarhan (invertebrates) ), an ornithologist (Dr. Anton Khalilieh), and four plant specialists from PCC: Mr. Adel Abu Ayyash, Mrs. Roubina Ghattas

(plants), Eng. Mohammad Abu Amrieh, Miss Marian Rishmawi. Please see Annex 6 for the process of collecting the data and evidence of field work on plants, and Annex 7 on animals.

**Activities 1.5 & 1.6** Established ecology, biodiversity, monitoring databases linked to project webpage (the indicators will be linked to specified area blocks along the valley and specified species population). Please see Annex 8 and 9 for the evidence of carrying out this work in the biodiversity management plan and conservation targets.

**Activities 1.7 & 1.8** Prepared biodiversity management plan for the Valley & Identify key sensitive habitats along the valley and set their conservation frameworks and restoration schemes: The biodiversity conservation plan was initiated by consultant PCC and in participation with the biodiversity committee (see <https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Biodiversity-Committee.pdf>), extensive feedback mechanisms with stakeholders. See contract delimiting conditions <https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/PCC-Contract-Year-two.pdf> and Annex 8 for produced conservation management plan.

**Activities 1.9 to 1.10** Submit conservation plan, establish a committee, communicate the plan: The management plan mentioned above (Annex 8) was presented via focus group meetings of the Biodiversity Committee to representatives of civil society organizations and government official. Feedback received at each stage of this process producing final conservation plan linked above which will also be launched in a wider setting in the third year. But even ahead of this and with the recommendation of the Environmental Quality Authority (EQA), the Ministry of Tourism (MoT) has accepted to add this biodiversity management plan to the existing WHS management plan of the Valley.

**Activity 1.11** Restore up to max. 3 Donums of key habitats...: Activities to achieve this were carried out despite the problems encountered because of the Covid-19 pandemic. Please see Annex 10 for the documentation of habitat restoration activities

**Activities 1.12 to 1.14** We published seven research papers (see Annex 3) which is ahead of schedule but other activities will be implemented during year three per schedule

## **Activities under Output 2**

**Activities 2.1 to 2.4** Completed and reported in the previous reporting period. See Annex 4 Year One Annual Report.

**Activity 2.5 Purchase agricultural inputs:** This activity is being carried out during each spring and autumn because purchases of agricultural inputs “seeds & transplants” is procured for each season over the three-year project cycle. The purchases concluded in year one had been reported in the Year One Annual Report, and new purchases for year 2 were done and distributed to farmers in April 2020 due to Covid-19 delays. The purchase requests were ordered in September 2019 and January 2020 for winter and summer seasons respectively. The ordered materials for 2019 winter season were local seeds, seedlings, bulbs, and trees while local seedlings and compost were requested for summer season and delivered 4-5 weeks later in April 2020. We focused on enhancing ownership and raising responsibility (capacity building) of the 81 farmers each with unique experience and issues including lessons learnt from the previous farming seasons. Please see Annex 13, page 22. Irrigation networks and water tanks, etc. are operational and reported in Year 1. PMNH team and a representative of Ministry of Agriculture conducted an inspection of the ordered seedlings on 20 November 2019 before their distribution to farmers. After witnessing the bad quality seedlings (chilly injury, too small seedlings, cut/ injured root system) that did not meet the required specifications, the locally established agricultural committees decided to accept the good seedlings while waiting for replacement of the bad ones. Test results showed bad germination rate. We therefore conducted a meeting with the supplier and decided to follow the contract conditions and issue replacements. See Annex 13 for evidence of Agricultural activities. For each of the last two seasons, more than 200 sacks of compost had been handed to farmers and the project team had been overseeing the deployment on land, while promoting better agricultural practices. A similar amount is planned for next summer. See Annex 13.

**Activities 2.6 to 2.8:** These are recurring activities every other quarters of working with farmers, land preparations, distribution of seedlings, consultations etc. These were successfully carried out this year as planned and are detailed in pages 16-21 Annex 13.

**Activity 2.9 Conduct two cross village exchange and demonstration visits (during first three cultivation seasons)** Husan farmers hosted Beit Jala farmers on 20 February 2020. They exchanged experiences about their traditional ways of agriculture such as using watering channels system, growing the original seeds that farmers used to exchange in this village, in addition to start making compost pile and use it as fertilizer. Despite the bad weather, farmers enjoyed sharing their experiences. See Annex 13A <https://almakhrour.palestinature.org/wp-content/uploads/2020/05/Annex-13A.pdf>.

**Activity 2.10 Evaluation report for summer /winter vegetables production:** Data was gathered about the production figures per farmer (see page 23 of Annex 13) but this is an ongoing process and more data will be collected for this coming summer and winter seasons.

**Activity 2.11 Conduct first/second festival during harvesting period of summer/winter cultivation seasons:** The first festival of the project was branded as “Nabe’ Al Khayrat” (Fountain of the Plentiful Goods) and occurred on Saturday 5 October 2019 at the Beit Jala community centre. The festival launched for a sustainable selling channels for farmers and participants’ products. The opening of the festival was under the patronage of the governor of Bethlehem governorate, with the presence of local institutions and individuals. The program of the festival included different shows from traditional dabkeh, Palestinian heritage show and clowns to entertain the children. The festival was announced in Al Quds newspaper, Facebook boosting event, and radio spot broadcasting. In addition to 8 street banners that were hanged in very lively areas in Bethlehem district, as well as distributing flyers and posters at restaurants and supermarkets and overcrowded areas. Festival invitations were sent to local and international organizations, schools, municipalities, village councils, Chamber of commerce, universities, partners, donors, ministries, hotels, scouts, youth clubs and others. There were more than 1000 visitors during the whole day festival and many bought different products. The exhibitors in general were very happy with the organization of the festival and appreciate this experience. Please see Annex 12 for the details of festival and its success and lessons learnt and Annex 13 relating to agricultural products.

**Activity 2.12.** The follow up report was prepared by the project partner ICP-BU (see Annex 12) and communicated the lessons learnt from the festival, highlighting challenges that might face farmers and participants regarding selling techniques and pricing issues and suggested improvements for the next festival.

**Activity 2.13** A very informative two-day workshop about **cooperatives’ partnerships and business enhancement** was conducted on 11 + 12 June 2019 at PMNH premises. The workshop was announced for in cooperation with Beit Jala and Battir Municipalities and the village councils of Al-Walajah and Husan. Farmers, women’s clubs and small producers in the four communities were invited to participate in the workshop. (Dr. Issa Ismirat facilitated the



workshop). Photo below

**Activity 2.14 Prepare the follow up report for marketing progress of the selected cooperatives:** Due to Covid-19 we are behind on this activity and it will be implemented fully in year 3. A template will be produced and communicated with producer cooperatives to establish a tracking sheet for the monitoring and communication of the marketing progress, focusing on products, prices, places, sales, and promotion techniques.

**Activity 2.15 Formulation of one committee for eco-tourism program from key stakeholders from local communities:** The eco-tourism committee was formed and this had been reported in the year one annual report. However, the role of the committee needs reviving in terms of designing and planning for eco-tourism activities and impacts, in the scope of the coming months the eco-tourism committee will offer initiative congruent with the eco-tourism business plan developed. See Annex 14 for the eco-tourism business plan for details of structures and activities.

**Activity 2.16 Study the Valley's path and identify the best places to mark the visitors' path:** Activity implemented, progress and work implemented for this activity had been reported in Year 1 report. The project team worked with Beit Jala Municipality and with the EQA to map alternative trails and then decide and mark a refined trail for ecotourism going through the valley from Beit Jala to Battir (see outputs below)

**Activity 2.17 Conduct cleaning works and installs 20 arrow signs, 20 plant-info signs and 2 maps with some volunteer works along the Valley's visitors' path:** A map was produced as a result of the activity 2.16 and is shown under outputs A1.6&1.7 below. A voluntary cleaning campaign was carried out with 15 participants (3 team members, 9 locals, and 3 volunteers) covering the chosen ecotourism trail. The signs were designed but have not been made and installed yet in order to deal with two impediments: a) Israeli occupation forces forbidding this, and b) the Coronavirus impact on getting vendors working to produce the actual signs. Our team will continue to work to resolve these two issues.

**Activity 2.18 Prepare follow up report for the level of enhancement in tourism sector in targeted area:** The second year tourism was delayed and partly due to delayed via Covid-19 issues and the delay in implementing the signs in the valley. Will be implemented in the third year.

**Activity 2.19 Provide four sub-grants (for £4000 each) for four existing/initiated women business enterprises:** The first announcement for the sub-grants was made during the workshops that took place in June 2019, and 7 + 8 July 2019, and through village and municipal councils (deadline for receiving applications 17/7/2019). A committee of four members (Mr. Moussa Rabadi – ICP Director; Mr. Nibal Nasser – Deputy Director, Abed Salam Aljanazreh – Project Manager and Nisreen Mansour – Project Coordinator) evaluated the 12 applications received based on these criteria:

#	Selection Criteria	Weight
1	Three women members minimum	0 - 1
2	Other Sources of Income	Full time Job - Part Time - Unemployed 0 - 1 - 2
3	Business idea	1 - 2 - 3 - 4 - 5
4	Availability of location for the project	Low Potentiality - Medium Potentiality - High Potentiality 1 - 2 - 3
5	Capital Investment needed	0 - 1 - 2
6	What is the motivation to establish/improve the business	Low - Medium - High 1 - 2 - 3
7	Participation in previous training courses and workshops under the project	No Participation - Activity 1 - Activity 2 - Activity 3 - Activity 4 0 - 1 - 2 - 3 - 4
8	Previous experience in sales (selling products)	1 - 2 - 3 - 4 - 5

The following project ideas were selected: 1) Beit Jala: Turathuna Alaseel Society, 2) Husan: Husan Women Club, 3) Battir: Battir Women Production Society; 4) Al-Walajah: Group of three women to merge between the two proposed ideas and work with them further on the project idea. A TOR for developing four business plans was prepared and request for price quotation was sent to individual consultants and firms, and deadline for receiving price quotation was on

22/8/2019, three price quotations were received; and the evaluation and selection committee awarded the bid to a consultant for supplying consulting service who provided the lowest prices. A meeting with Al-Walaja village Council and the beneficiaries from Al-Walajah took place on 14/6/2019 regarding the selling point, where they asked to have the selling point at the marketing hub that will be every Saturday in Beit Jala, the reason for this request is because there is not enough visitors to Al-Walajah village like the other villages Battir and Husan, and accordingly a change request was sent to Darwin for this purpose, and it was approved to establish the selling point of Aa-Walajah at Beit Jala weekly market. Four business plans prepared by the consultant Mr. Ibrahim Al-Bandak September to November 2019. Mr. Ibrahim visited the four sites to develop together the business plans (see Annex 14)

In the last visit before submitting the final version of the plans, the project coordinator accompanied the consultant to ensure receiving together the final version of the business plan which includes the equipment needed by the four women enterprises. Two meetings between ICP Director, project manager and project coordinator took place one end of November 2019 and mid of January 2020, regarding provide four sub grants for the four women enterprises. The detailed list of required equipment which prepared by the project coordinator was discussed, in addition to the method of purchasing whether it will be directly by the four sites or through the Finance Office. The conclusions of these two meetings were to contact DARWIN in order to get their approval for the proposed procurement process and to set a date to conduct a meeting with the finance office at the University of Bethlehem. Four agreements between Bethlehem University and the four women enterprises were prepared and sent to project manager and Finance Office for their approval at end of January 2020. A workshop with the women of four sites was conducted, in order to discuss the agreements and to finalize the detailed specification for each item required, and was done on Wednesday 22/1/2020. Several meetings with Finance Office Staff were conducted from late January till beginning of March 2020, regarding suppliers' bidding, collecting and evaluating bids, and selecting suppliers. Unfortunately, the purchase orders were sent to 8 suppliers two days before the stay-at-home policies were instituted on 5 March 2020 due to the Covid-19 pandemic. Only two suppliers (Beit Alkahraba' and Awj Co.) were able to provide Husan and Al-Walajah sites with 3 electrical machines and stainless steel kitchen tables were delivered by the above suppliers on Thursday, 5 March 2020. The rest of the suppliers will make the delivery when the Covid-19 situations allows them to do so.

**Activities 2.20 & 2.21:** will be implemented in the third year.

### **Activities under Output 3**

**Activity 3.1** This activity will be implemented in the third year when the biodiversity conservation management plan is publicly presented.

**Activity 3.2 Conduct four one-day workshop to enhance marketing networks:** Two workshops were implemented and another two workshops will be implemented in next year as planned. The workshops discussing "Start up your own Business and Methods of Good Governance" were conducted on 7 + 8 July 2019 at the Al-Walajah Village Council hall. The two workshops were announced in cooperation with the Beit Jala and Battir municipalities and the village councils of Al-Walajah and Husan, farmers, women clubs and women producers in the four communities were invited to participate in the two workshops. The first day was facilitated by Mr. Usama Khalilieh, and there were 20 participants of which 15 females and 5 males. The second day was facilitated by Dr. Issa Ismirat, and there were 14 participants, of which 12 females and 2 males.

**Activity 3.3** Conduct a two-day workshop for alternative tourism operators and build an eco-tourism plan: Activity implemented, and described in the Year 1 report at Annex 4.

**Activity 3.4 Conduct four two-days training sessions for best sustainable farming practices, permaculture, organic farming:** This activity was implemented via four workshops in Husan, Battir, Al Walajah and Beit Jala (see below table for details of the training delivered using mixed methodology of practical coaching on the land and some theoretical instruction). The practical coaching & training focused on water and soil management techniques. The workshops included discussion of agro-ecological farming and its political and environmental significance as well as feedback from farmers on the challenges they face on a day to day basis. Description of the training and issues around that are documented in detail in the Agricultural Report on page 29 (& 31) in Annex 13

**Activity 3.5 Conduct four two-days training sessions for best practices in conserving biodiversity:** Four groups of farmers from the targeted villages attended two days workshops (2 targeted areas per day) the workshops conducted aimed at raising awareness of biodiversity conservation practices and how to include them in agricultural practices. As the workshops focused on biodiversity conservation and its relationship to the agriculture, also there had been an educational tour show farmers the environmental/ agricultural modules in the botanical garden and the community garden at PMNH. These modules include: water harvesting techniques, composting: compost bays way (another way than the way that was applied in the practical training), Hugo culture system, aquaponics system, reusing plastic bottles to build a greenhouse/ nursery, the green wall technique using plastic bottles, in addition to show them rehabilitated animals at the museum to encourage them to protect the animals and nature.

Date implement	Areas	Attended	Planned
17.08.2019	Biet Jala	18 (plus 2 youth)	29
	Al-Walajah	6	13
24.08.2019	Husan	18	19
	Battir	21 (+4 youth)	19

Please see for pictures



**Activity 3.6 Conduct one-day training session for women entrepreneurs:** A one day workshop about **Selling Point** was conducted on Monday 9 December 2019 at ICP main building, the workshop was announced in cooperation with the Beit Jala and Battir municipalities and the village councils of Walajah and Husan, farmers, women clubs and women producers in the four communities were invited to participate in the workshop. Mr. Usamah Khalilieh was contracted to facilitate the workshop. The main objective of the workshop was to go into Marketing/selling details with the women cooperatives which can help them boost their revenues and at the same time allow the trainees (cooperatives) to understand the practical aspects of selling and the challenges & opportunities on the ground in addition to how to conduct effective selling activities. See for evidence <https://almakhrour.palestinature.org/wp-content/uploads/2020/05/Women-empowerment.pdf>

**Activity 3.7 Conduct two two-days food processing training sessions:** Two days' workshop about **Food Processing** was conducted: the technical session on Monday 16 December 2019 at ICP main building while the practical session was conducted on Tuesday 17 December 2019 at Turathuna Al-Aseel Association, Beit Jala. The workshop was announced in cooperation with the Beit Jala and Battir municipalities and the village councils of Al-Walajah and Husan, farmers, women clubs and women producers in the four communities were invited to participate in the workshop. Ms. Manar Manasra was contracted to conduct the two days

workshop. The main objective of the training workshop is to present and explain the process of comprehension, in addition to correct some wrong behaviours used by women during the food processing. Furthermore, to be able to produce new products demanded by local market. There were 15 females participants attended the first day, while 19 females attended the second day workshop. See for evidence: <https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf>

**Activity 3.8 Ten meetings for 5 schools located in Bethlehem District:** A committee formed of members of the project team in addition to the public relations coordinator of PMNH approached the ministry of education in Palestine and coordinated to work with the schools and deliver the awareness workshops needed. We approached several schools and held meetings with 12 schools in the four communities surrounding the valley (Battir, Al-Walajah, Husan and Beit Jala). Several educational activities were initially held in small focus groups at the schools. We decided then to take students of elementary schools in seven schools from these communities on field trips to the valley. A minimum 20 student from each school were nominated/selected by their teachers as those who could be influential among their peers and showed interest in environmental issues (total 150 students participated, 50% female). They were taken on day-long trips involving hikes starting in Beit Jala (8:30 AM) and walking through the valley to Battir and along the way stopping at stations to learn and interact. The training for students included hands on work and interactive workshops that covers ecosystems, fauna and flora, human impact on the environment, cleaning any trash found through the way and much more. The focus was on behavioural change.

Date of Field trip	School
Wednesday 20/3/2019	Battir male elementary
Monday 25/3/2019	Tel-Rabee' Girls school (Husan)
Tuesday 26/3/2019	Battir female elementary
Thursday 28/3/2019	Wadi Damas School (Beit Jala)
Saturday 30/3/2019	Al-sadeeq school Husan (males)
Tuesday 2/4/2019	Al-Walajah School (mixed boys and girls)
Tuesday 6/4/2019	Beit Jala Girls school



See also this link for other school and community activities

<https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Community-activities.pdf>

**Activity 3.9 & 3.10** Reported activities in year one (Annex 4) and also see Annex 16 for year 2 activities along those lines. Yet, much more work (e.g. on environmental clubs) was started in schools and will be progressing/implemented in the coming reporting periods.

**Activity 3.11 Disseminate up to 106 social media announcements, 15 newspaper news:** Many activities were conducted in this area, a summary is provided in the appropriate section (outputs//indicators)

**Activity 3.12 Conduct 4 TV sessions to discuss on air the different subjects the project is dealing with and supporting:** We have already conducted three TV sessions. Details and links are provided in the appropriate section (outputs//indicators). More TV sessions/videos will be forthcoming. Further, since the earlier part of the exploration was funded by a small grant (\$29,500) from National Geographic Society and partially funded by the Darwin Initiative (this project), we produced a video highlighting the Valley (see video here <https://youtu.be/Mjdvsk6pkec>)



**Activity 3.13 Prepare a web page for the project:** The website is operational and is being updated as needed. The link <https://almakhrour.palestinature.org>

**Activity 3.14 Prepare and Print brochure for the project area:** Will be implemented in the third year of the project.

**Activity 3.15 Conduct follow up surveys for sample of local households, 20% of total beneficiaries (50% females):** Graphs describing the status while making the workshops with the farmers found on page 34 in Annex 13

**Activity 3.16 & Activity 3.17** Activities for 3<sup>rd</sup> year to be done

## 3.2 Progress towards project Outputs

**Outputs for A1.3 and A1.4:** We identified 19 species of mushrooms, 30 species of mammals, 63 bird species (resident breeders, summer breeders, and passage migrants), 3 amphibians, 12 reptile species, 20 species of butterflies, more than 300 identified insect species, 4 species of scorpions, 5 centipede species, 16 land snail species, > 400 species of plants, and > 35 fossil gastropods (Cenomanian). This resulted initially in six peer reviewed publications and more on the way (see Annex 3). For detailed reports see Annex 6 & 7 <https://almakhrour.palestinature.org/wp-content/uploads/2020/05/Annex-6-Plant-Biodiversity.pdf>  
<https://almakhrour.palestinature.org/wp-content/uploads/2020/05/Annex-7-fauna-1.pdf>

**Outputs A1.5 & 1.6** Establish ecology, biodiversity, monitoring databases linked to project webpage: PCC partner took the results of the inventories outlined above producing a model Biodiversity Conservation Plan (BCP) which went through several editing and modification steps. The main threats and human interferences were also recorded as seen on site. The data were included in technical reports posted at <http://almakhrour.palestinature.org/about-us/>

**Outputs A1.7 & 1.8** Prepare biodiversity management plan for the Valley & Identify key sensitive habitats along the valley and set their conservation frameworks and restoration schemes Several meetings had been held to discuss and decide upon the important conservation factors, the targeted area had been described in the report and produced materials as of Battir World Heritage Property (WHP), "Palestine: Land of Olives and Vines — Cultural Landscape of Southern Jerusalem, Battir, Palestine", I would like to highlight here that this refers to the same targeted area of our project which is Almakhrour valley consisting of areas and lands in the villages of Beit Jala, Husan, Al-Walajah, & Battir. See produced materials in Biodiversity conservation plan (Annex 8) and targets Biodiversity target report (Annex 9)

**Outputs A1.9 & 1.10:** Conservation plan (Annex 8) was agreed to after consultation by key stakeholders (Annex 11). In year 3 we will launch it (delayed due to Covid-19)

**Outputs for A1.11** Despite the crisis and curfew caused by Covid-19 pandemic, the project team side by side with the partners and stakeholders achieved this activity. As part of the biodiversity conservation action done at Al Makhrou Valley under the Darwin Initiative project entitled: "*Biodiversity Conservation and Community Development in Al- Makhrou Valley in Bethlehem, Palestine*", Bethlehem University- PIBS/BU is restoring key habitats at Al Makhrou valley. Based on ecological and biological parameters obtained earlier during the implementation of the project, and based on socio-economic data assessed on site, it was decided by the project team to cultivate natural native trees in degraded or abandoned lands in areas of high conservation value as set by the project (see final restoration report Annex 10) .

### Sub-outputs for Second Output

**Outputs 2.1-2.4** Done in first year (Annex 4)

**Output 2.5:** Done every season and reported on page 22 of Annex 13.

**Outputs for A2.6 to 2.8:** Land preparations, weed removal and organic compost additions for selected land-farms & conduct 4 follow up field visits per farmer per season had been implemented regularly, documentation including data and pictures of visits are put in pages 16-21 in Annex 13. Training of farmers and work with them with Permaculture specialist Alice Grey

(partner Byspokes from UK) can be seen in this video <https://youtu.be/OrCsh1t4aKs> . The Distribution of agricultural inputs and cultivation of diverse summer and winter vegetable crops. Distribution of supplies was implemented as planned per season, reports & names in addition to pictures and map are supported in the relevant sections. These field visits included activities to technically advise farmers on best practices for dealing with things like weeds and preparing the land better for farming collecting plant debris for composting, collecting seeds, storing seeds, use of plants like Basil as insect-repellent, other biological control methods, to avoid practices which are less friendly to the environment. We made record by GPS coordinates for each farmer. Farmers were or became aware of plans and wildlife around them and how best to relate to these. Whether it is corridors of plants like oak, Inula, pink rock rose, and Caparis, or the value of wildlife from pollinators to gazelles. As we write this report, farmers are planting for the summer season, while some of them are still harvesting winter crops like eggplants, peppers, lettuce, and parsley. Some of the farmer (like Battir farmers) planted other crops like cauliflower and cabbage. Summer interspersed plants while others had two different production stages. During the visits time was set-aside to check on water management, waste-management, and overall ensuring that the practical training done in the first year is continuous and is used. Farmers were also coached on marketing including encouraging them to attend marketing festivals (from this project or other projects). The production sheet of the summer season were collected from farmers who committed to fill it and the other farmers who were not able to fill it were asked about the amount of harvested. Details pages 16-21 in Annex 13.

**Outputs A2.9** Conduct two cross village exchange and demonstration visits (during first three cultivation seasons), a visit implemented and other visits are to be implemented pictures of visits and details are supplied in the relevant activities section. For the agricultural issues and outputs and evidence see Annex 13A <https://almakhrou.palestinenature.org/wp-content/uploads/2020/05/Annex-13A.pdf>

**Outputs A2.10** Evaluation report for summer /winter vegetables production and income generation / food self-sufficiency of this activity on yearly basis. This is ongoing but preliminary data show products (e.g. see graphs on page 22 of Annex 13)

**Outputs A2.11** Conducted first/second festival during harvesting period of summer/winter cultivation seasons. During the opening of the festival, the project manager Abdelsalam Aljanazreh briefed the attendance about the project and its required impact, highlighting the importance of biodiversity conservation and better farming practices, also Eng. Mohammad Najajreh of PMNH talked about ecological farming and its importance. In addition, there was an announcement to the participants and visitors for the marketing hub that will be opened every Saturday all over the year, and participation is open for farmers, cooperatives, women clubs and small scale producers. The opening of the market will take place very soon. Which will constitute a sustainable selling point for the producers. There were volunteers of youth females and males who helped the festival team during the event, and they were very active and happy with the experience. The preparation of the festival went very smoothly, there was a high level of cooperation among all stakeholders and the project team, there was a diversity of products and exhibits, visitors were happy and satisfied, and are waiting for the next festival under the project. Local media was invited to the opening of the festival, and live coverage was made by Palestine TV and Radio Mawwal, in addition to the interviews conducted with the project manager and mayor of Beit Jala Municipality.

The second festival implementation was stopped because of the Covid-19 pandemic and will be planned for and resumed as soon as the crises is contained. See <https://almakhrou.palestinenature.org/wp-content/uploads/2020/05/Annex-12-Lessons-learn-from-the-Festival.pdf>

**Outputs A2.13.** Conducted 2-day workshop for cooperatives' partnerships and business enhancement, workshops had been conducted evidence report and data are available in the relevant activities section. Pre and post assessment were conducted to evaluate the knowledge of the participants about the topics of the workshop, and the results were as follows:

#	Topic	Pre-Assessment Results				Post-Assessment Results			
		Wea k	Averag e	Goo d	V. Goo d	Wea k	Averag e	Goo d	V. Goo d

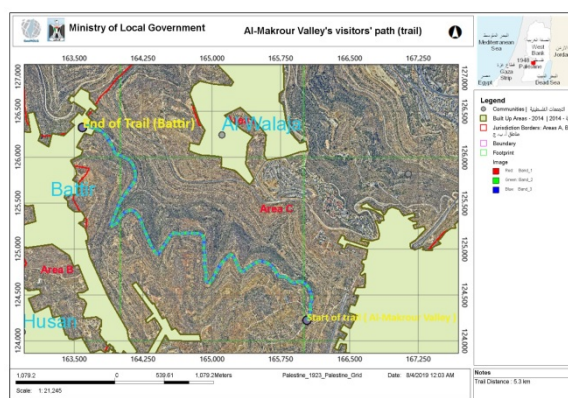
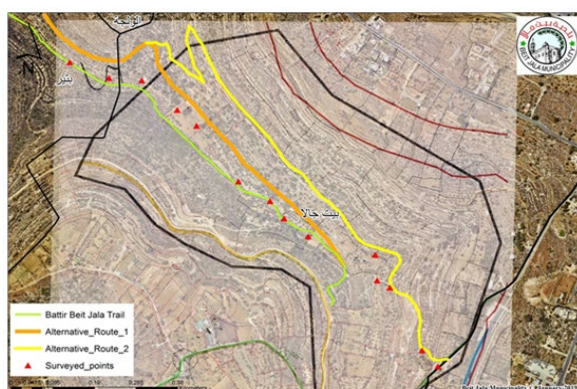
1	The extent to which cooperatives need partnership	6	56	17	22	0	11	61	28
2	How to start a partnership	39	22	33	6	6	11	56	28
3	Key Elements of Partnership	44	33	17	6	0	6	44	50
4	Key functions and roles of partnership	39	39	17	6	11	11	44	33
5	Qualities of good Partnership	28	28	44	0	0	6	61	33
6	Building partnership	44	22	33	0	0	11	56	33
7	the Importance of value chain	22	39	28	11	0	0	61	39
8	Value Chain Analysis	33	56	6	6	0	0	56	44

There were 22 participants in each day, of which 17 females and 5 males in the first and second day.

**Outputs A2.14.** While this is ongoing and will be reported on in year 3, the project team had been tracking and trying to create success stories of our beneficiaries like involving our beneficiaries in local markets and enhance sustainable selling points like the case of Wafa' Hajjle and many other farmers sold part or all of their winter vegetables in the local market that opens every Saturday. Farmers expressed their satisfaction and we encouraged other farmers to use this venue. It maybe even desirable to extend this market for longer time on the ground. See Annex 13 and more will be accomplished in year 3.



**Outputs A2.16 & 2.17** We studied the Valley's path and identified the best visitors' path that reflected both hikers' needs and local needs and biodiversity issues and considered alternative paths (Figure below) which was then adopted officially by the EQA (fig. on right)



**Outputs A2.19.** Providing four sub-grants (for £4000 each) for four existing/initiated women business enterprises is in the process and while methods and selections were made (see activities' sections), the actual delivery and work with women was delayed (Covid-19 related) and will be reported on next cycle.

**Outputs A3.2** Conduct four one-day workshops to enhance marketing networks: two workshops were implemented and another two workshops will be implemented next year. The workshops discussed "Start up your own Business and Methods of Good Governance" the details and report of the output had been supplied in the relevant activities section.

**Outputs A3.4** Conducted four two-days training sessions for best sustainable farming practices, permaculture, organic farming: This activity was implemented via four workshops in Husan, Battir, Al Wallajah and Beit Jala the training was delivered using mixed methodology of

practical coaching on the land and some theoretical instruction. The practical coaching & training focused on water and soil management techniques. The workshops included discussion of agro-ecological farming and its political and environmental significance as well as feed-back from farmers on the challenges they face on a day to day basis. Report and details are in the agricultural report <https://almakhrou.palestinenature.org/wp-content/uploads/2020/05/Annex-13-Agriculture.pdf>

**Outputs A3.5** Conduct four two-days training sessions for best practices in conserving biodiversity: four groups of farmers from the targeted villages attended two days workshops (2 targeted areas per day) the workshops conducted aimed at raising awareness of biodiversity conservation practices and how to include them in agricultural practices. Via facilitator notes, and the follow-up visits to community members and farmers, we evaluate success of delivery of information. But are now updating the developed manual for farmers in Arabic). See agric input <https://almakhrou.palestinenature.org/wp-content/uploads/2020/05/Annex-13-Agriculture.pdf>

**Outputs A3.6 and 3.7** Conduct one-day training session for women entrepreneurs: implemented and the training had major addition of value towards the capacity building for women entrepreneurs which poured into the achievement of the outcome through the economic empowerment of women and through gender equality improvement as this enables women economically, details are in the related activities section. Pre and post assessments were conducted to evaluate the knowledge of the participants about the topics of the workshop. Conduct two two-day food processing training sessions in this section also there had been great benefit to women through giving them tools to improve their production techniques. As Muna Matar a woman from Beit Jala quoted “this training made me more able to enhance the quality of my products”, details of the training are in the related activities section. Pre and post assessments were conducted to evaluate the knowledge of the participants about the topics of the workshop. See this link <https://almakhrou.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf>

**Outputs A3.8 to 3.10.** See Annex 16 on achievements <https://almakhrou.palestinenature.org/wp-content/uploads/2020/05/Educational-Awareness-Workshops.pdf> but this is an ongoing process and there will be more activities here in year 3

**Outputs A3.11.** During this reporting period 55 posts on social media were published by PMNH and stakeholders, so far, including social media platforms from the four communities covering the different activities of the project Here are two examples from facebook <https://bit.ly/3cgK4Dy> and <https://bit.ly/2yDxDTE> Also press releases for the trainings and the festival had been placed in two famous local newspapers, and 2 announcements on news websites, like survey conducted on mushrooms see link <https://bit.ly/2zpOvNT> , and a workshop on ecotourism see link <https://bit.ly/2xO3a4Q> . Many more of these media coverage will be demonstrated in the coming reporting periods more. See also this Bethlehem University Magazine (cover article) <https://www.palestinenature.org/conservation/BUM-cover-story.pdf>

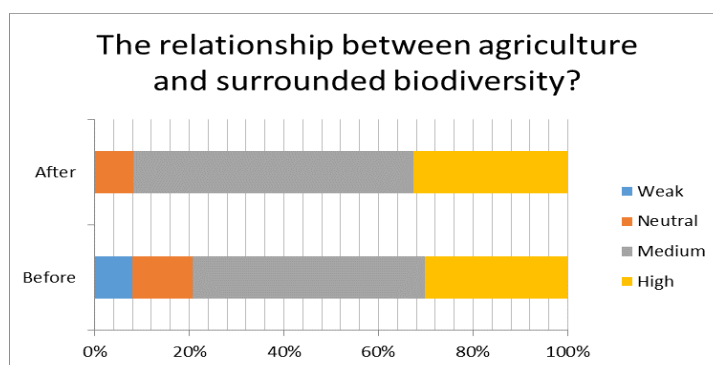
**Outputs A3.12.** TV sessions produced: 1) “our respect for our environment is our respect for ourselves” <http://youtu.be/-yA9il9GVYk>, 2) “Environmental awareness for children (<http://youtu.be/oxxUqk4-PA>), 3) Festival highlighting the project and its impact (<http://bit.ly/2MY7qwh>).

**Outputs A3.13** website operational <https://almakhrou.palestinenature.org>

**Outputs A3.14** For next period

**Outputs A3.15** This is an analysis chart taken from one of the surveys conducted on more than 50% of beneficiaries. More in the agricultural report (Annex 13).

**Outputs A3.16 & 3.17:** for 3<sup>rd</sup> year.



### 3.3 Progress towards the project Outcome

Outcome	Status
<ul style="list-style-type: none"> <li>• Conservation targets, habitats of value</li> <li>• Biodiversity inventory and monitoring datasets</li> <li>• Necessary feeds to management plan</li> </ul>	Done. Links to data Annexes 5-7
<ul style="list-style-type: none"> <li>• SWOT analysis and consultation with stakeholders</li> <li>• conservation frameworks and biodiversity management plan</li> <li>• restoration schemes and works</li> <li>• enhance adaptation to climate change</li> </ul>	Done. Links to data Annexes 8-10
<ul style="list-style-type: none"> <li>• Visitors path at the valley developed</li> <li>• Women market selling points established</li> <li>• Partnership between sustainable tourism operators and local communities built</li> </ul>	Paths set up (see map Page 12 above) Women training done in year 2 (see <a href="https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf">https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf</a> ) The partnership and follow-up aspects will be done in year 3
<ul style="list-style-type: none"> <li>• Traditional farming and food security enhanced</li> <li>• Marketing channels for local products opened</li> <li>• Local products festivals conducted</li> </ul>	Excellent progress according to schedules see reports Annex 12 and 13 and also <a href="https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf">https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf</a> And <a href="https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Annex-12-Lessons-learn-from-the-Festival.pdf">https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Annex-12-Lessons-learn-from-the-Festival.pdf</a> <b>YET, this is ongoing also for year 3 especially in regards to community benefits</b>
<ul style="list-style-type: none"> <li>• Relevant educational material, publications, TV sessions, website, social media etc.</li> <li>• Best practices in conservation, farming, eco-tourism and marketing introduced</li> </ul>	Partially done – evidence under outputs for Activities 3.8 to 3.15 on page 13.
<ul style="list-style-type: none"> <li>• Progress and final reports.</li> <li>• Project Baseline and end line evaluation sheets.</li> </ul>	For third year

### 3.4 Monitoring of assumptions

**Assumption 1:** Political turmoil does not interfere in project implementation; (the project has flexibility in shifting locations when one community has disturbances).

**Comment 1:** Numerous attempts by settlers supported by the Israeli were recorded that encroach on the buffer Zone of this world heritage site. Our team working on this project has challenged these activities (see <https://www.palestinenature.org/conservation/Letter-from-UNESCO.pdf> for our intervention via UNESCO). Palestinian farmers and inhabitants of the valley complained about demolishing of farmhouses, burning structures and confiscation of lands. Limitations on movement and work are evident. For example activities relating to installation of ecotourism path signs were postponed until because the Israelis are not allowing this. Continuous efforts are exerted by the project team working with farmers and the communities to address and transcend these challenges and hence be resilient in our lands.

**Assumption 2:** Staff and workers employed by the project are living in Bethlehem Governorate to ensure their availability during needed periods during the project implementation despite any political turmoil.

**Comment 2:** Although the two project employees are living outside Bethlehem governorate, the political turmoil created little restriction on this matter. However during the unexpected pandemic, limitation of movement was evident and we were forced to get special permission for the agricultural specialist to travel to help council farmers and distribute products to them/.

**Assumption 3:** Assume supplies and equipment remain possible to be purchased.

**Comment 3:** Supplier & equipment remained available until the unexpected pandemic of

Covid-19. However, we adapted in many ways including shifting some operations online, and we were able to buy and distribute seedlings and transplants to farmers despite the closure.

**Assumption 4:** Continued cooperation of local and national authorities.

**Comment 4:** There is still uncertainty about the function and structure of the current Palestinian Authority which suffers under Israeli occupation. The Israeli authorities now threaten to annex even larger swaths of the West Bank. Our cooperation with existing authorities is exemplary even despite these past risks and we hope we will adapt to any changing circumstances.

**Assumption 5:** Potential travel restrictions could delay arrival via alternative roads (we need flexibility in timing of project activities).

**Comment 5:** So far it is manageable although delays have happened in executing certain activities by Covid-19 and political restrictions.

**Assumption 6:** Women participation in town hall meetings, interviews with stakeholders, or committee formulated for restoration, depends on availability of women in related positions.

**Comment 6:** This risk had been mitigated by the management team on two levels: 1) having our agricultural specialist a female has given her free and open channel of communication with women of all households (all beneficiaries), 2) focused capacity building for females.

**Assumption 7:** Buy-in by locals farmers etc

**Comment 7:** Dealt with via dynamic and flexible procedures (thinking outside the box). For example motivation increased by using the language of human rights (our rights to the land, work in permaculture as a form of resistance) and use of cultural heritage issues. The latter was a fortuitous discovery as our museum was engaged in a project (ended in August) to preserve and protect threatened agricultural and natural heritage. We established local committees for the farmers and the beneficiaries with the involvement of the local authorities to mitigate any risk that might emerge in this regard.

**Assumption 8:** Cooperation of local authorities of targeted localities

**Comment 8:** Village councils and municipalities are cooperative and are playing positive and enthusiastic roles in the project's activities.

**Assumption 9:** Locals including schools willingness to participate in training sessions and workshops to learn about local and national environment, biodiversity conservation, and business interventions for better livelihoods.

**Comment 9:** the project team succeeded in positive coordination with the Ministry of Education and Higher Education to gain access to schools so we do not see this as an issue.

**Assumption 10:** The trainees buy-in the training educational materials, orientations and recommendations (the project will ensure motivation and engagement of all participants)

**Comment 10:** There had been positive motivation and engagement but still there is some fluctuations please refer to comment number 7, which elaborates more the current status of this assumption.

**Assumption 11:** Some of the targeted farmers might change by the project team during the project implementation; only in case they show inefficiency in delivery aimed at outputs.

**Comment 11:** there had been some minor changes of targeted farmers during the scope of the project, this change was upon the farmers demand, and new farmers had been added instead of them: please see below: Four new farmers (two females and two males) were selected (three of them in Dec, 2019 and the fourth one in Apr, 2020) to replace three old ones from Beit Jala and the one from Husan area.

### **3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation**

**Biodiversity:** The project conserved biodiversity by several mechanisms: a) work with farmers on permaculture and organic agriculture ensured that at least for the 80 beneficiary farmers, no pesticides are used and buffers and other measures in their fields ensure rich biodiversity (with ripple effect to other farmers), b) the biodiversity inventories alerted us to areas for conservation which we were not anticipating (e.g.see Annexes 8-10).

**Poverty alleviation:** The valley farmers (targeted area) are from the surrounding four communities (Husan, Al-Walajah, Battir, Beit Jala). Three of those communities are marginalized villages under threat and with significant economic difficulties. The farmers and all the communities learned to expand their food production via both direct material input of seedlings, irrigation systems etc and also indirectly via the knowledge acquired. We have

baseline data for knowledge of workshop participants, for example, as cited above, and in the coming final year the measures of improvement will be easy to quantify (It takes two years to really get a farm going properly with permaculture). The same can be seen with marketing points, tourism etc. The work with marginalized farmers on increasing their agricultural products is detailed in Annex 13. While it is hard yet to measure impact on ecotourism yet because we barely finished setting the path and have not yet designed or printed the tourism promotion brochure, we did engage in preparatory activities which are detailed in Our tourism business management plan (Annex 14) <https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Annex-14-Tourism-Business-plan.pdf>

#### **4. Contribution to the Global Goals for Sustainable Development (SDGs)**

(1) reducing poverty reflecting on SDGs 1 & 2 by strengthening local communities' food security through sustainable agriculture; mainly increasing agricultural productivity and incomes of small-scale food producers, in particular women, secure agro-resources, and implement resilient agricultural practices, (2) sustaining community development reflecting on SDGs 8,11, by strengthening efforts to protect and safeguard Palestine's cultural and natural heritage, reducing the adverse environmental impact of human population, promoting sustainable tourism/agriculture that creates jobs (for women and youth) and promotes local culture and products (3) advocating for responsible consumption and production; reflecting on SDG 12 by introducing organic production concepts, reducing household's/community's waste through composting and adopting the traditional farming concepts, (4) securing gender equality reflecting on SDG 10 by integrating women in the project activities, where gender inclusion and women's full and effective participation and equal opportunities will be taken into consideration at all levels throughout project implementation, and giving women equal rights to economic resources; mainly through the business enterprises initiative that will take place during the project, (5) improving quality of life reflecting on SDG 13&15 by introducing nature protection concepts, promoting the implementation of sustainable management restoring degraded areas, enhancing adaptation to climate change, and integrating Al-Makhrour ecosystem and biodiversity values into national and local planning.

#### **5. Project support to the Conventions, Treaties or Agreements**

The project goes in line with several conventions and treaties: 1) Convention on Biological Diversity (discussed in first annual report especially articles 8,10,12,14.16), 2) treaty of ITPGRFA as it also addresses the cultivation of native species and varieties in the targeted agro-ecosystem. It goes in line especially with Article 5 (mainly 5.1) and Article 6 (mainly 6.2), Article 9 (mainly 9.2), Article 13 (mainly 13.2). Of the crops targeted by the project and covered by ITPGRFA are: broad beans, fava beans, cowpeas, eggplants, radish and cabbage.

#### **6. Project support to poverty alleviation**

See section 3.5 as this redundant with it.

#### **7. Consideration of gender equality issues**

All our project activities had considered enhancing and promoting gender equality in our targeted areas that is on all levels, since we are targeting mainly masculine communities in the villages, we have initiated the involvement of women in all activities, relating to awareness, capacity building, and mostly in economic benefits, that is visible in the selection and granting of the four grants ought to create economic unites for women, thus we have worked to involve women economically to enable it also socially and give her capacity to participate in her families decisions and on the social village level. Regarding this as our agricultural specialist (Summer Shahin) is a female, the project succeeded in creating better status for women through their involvement in the project activities. Twelve women participated in the training in Permaculture. Of the 80 benefitting farmers, 30 (40%) were women. We noted that for all the male "beneficiaries" had farmer spouses did more work in the fields than the men. Our agricultural specialist who led the work with the farmers being a woman ensured all household members especially girls are involved. See also <https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf>

## 8. Monitoring and evaluation

The monitoring and evaluation plan has been going smoothly and is adding value through keeping track of the project and insuring continuous improvement. Indicators are effective in describing the congruency between the activities, outputs, and outcome. That is visible in many cases, like capacity building for permaculture, environmentally friendly practices, reviving of traditional farming, awareness creation for the public, and conservation efforts. The project team does M&E continuously using tools like reporting, minutes, brainstorming, tracking sheets, pictures, produced videos, attendance sheets, MOUs, signed contracts, etc. Some indicators are measured before and after in same day (e.g. for workshop trainings) while others are measured longer term (e.g. the biodiversity survey to measure change after almost three years of the project). For economic benefit through agriculture and marketing, we monitored for the local community by monitoring the agricultural outputs of the beneficiaries farmers another aspect of M&E for farmers was the fact that the agricultural specialist was required to visit each farmer 4 times per season, "spring & fall" (i.e. 320 individual meetings per season and 640 per year). This was cumbersome for agricultural specialist and some farmers thought it too much. At each step we adapted our procedures and our methodologies depending on any changing circumstances also other issues emerged. Delay because of Covid-19 pandemic relating to indicator 2.19 was adjusted to give support to women entrepreneur cooperatives. Covid-19 pandemic forced us to adjust M&E in certain areas but mostly related to timeframes.

## 9. Lessons learnt

Research represents a major element in our project and in the project design we had limited money for research. We even did not budget for some activities like a bird survey before and after. It was fortuitous that Prof. Qumsiyeh had a National Geographic Society (NGS) Explorer grant that overlapped with the beginning of this project so some of the funds were used for the initial surveys since there was no budget for them on the Darwin Grant. For this third year of work some budget reallocations will be required. Fortunately we did save significant funding due to activities that were restructured (and still now being rethought) due to the Covid-19 crisis. From working with locals, we realized the need is much more than we were able to supply due to project limitations. For example many really good farmers not part of our 80 beneficiary farmers came to us for support in the first and second year. We need to think and restructure to have a wider impact. One way for example is to say to farmers who benefitted that now it is your turn to give other farmers. Also perhaps part of the project should have been to encourage farmer cooperatives. The added advocacy elements were not anticipated. One of the by-products of our project is the impact created through the networks with government agencies which viewed the project as of great importance to the area and pushed us not to be just facilitators, researchers, and helpers but also ADVOCATES. We insisted that this was a team efforts and the model of the University-Farmers-local and National government partnership being developed successfully in this area will be expanded. Already the Environmental Quality Authority has selected us to redo the National Biodiversity Conservation Action Plan (last one 1999) and produce the 6<sup>th</sup> National Convention on Biological Diversity report (the fifth one was 2015). Further, we (and all of humanity) did not anticipate a pandemic paralyzing activities. Our progress was not stopped & we just had to adapt and evolve our methods and strategies. We were grateful to the Darwin Initiative for the flexibility of financing to do the needed (communication and approval of changes available in your offices). Communication channels using Zoom, Google hangouts WhatsApp & Facebook ensured all stakeholders, partners, committees and others stayed in the picture. Finally, the sudden resignation of the previous project manager in this second year and recruitment of another manager meant having the new manager catch-up on the work

## 10. Actions taken in response to previous reviews (if applicable)

Link to reviewer comments at <https://app.luminpdf.com/viewer/5ebea24098f4c000176e9508>  
Comments:

- 1) Spell out Palestinian ministries (EQA, MOT etc): **Done**
- 2) Evidence of partnerships needed: Partnership/contract with PCC provided here <https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/PCC-Contract-Year-two.pdf> and for other partnerships see <https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Partnership-documents.pdf>
- 3) Add all important documents and annexes to the report and number them (not shared drives): Done (pages 57-58 below).



- 4) Make sure all links work: Done. Before, we had used shared drive which was finicky. Now links are on a website that is stable (our own servers) and in addition allow access to all people to see data (which in any case need to be seen as part of our outputs). <http://almakhrour.palestinenature.org/>
- 5) Research papers in press added to this report: In the first annual report, there were three papers in press and those have since been published plus others See Annex 3.
- 6) The reviewer mentions in the M&E section an issue under outcome '0.8' [sic this should be 0.3 and 0.4 since there is no 0.8]: We agree that this was not written clearly in the proposal logframe and household may need revising or measure qualitatively improvement in environmental knowledge of households. In year 3 we will survey household to ensure improvement in knowledge of biodiversity and environmental issues facing the valley.
- 7) "The project may discuss the need to add to the activities a tourism carrying capacity evaluation of the project area to understand better potential threats of tourism activities to local conservation areas": We fully agree. Some of this is discussed in Annex 14 and we have examined nearby country tourism efforts as suggested (thanks)
- 8) M&E Initial household survey is included in Annex 13

## 11. Other comments on progress not covered elsewhere

One progress was convincing Ministries to coordinate with NGOs and academia so that everyone doing work in the area coordinates their efforts. Ministry of tourism took the lead of gathering all of us. This was critical and unanticipated outcome of our project because there were local actors in the area who practice interventions that are not based upon proper measures of biodiversity conservation. Also and while not in the original work plans for the area, we engaged in a number of community activities and Prof. Qumsiyeh used the valley in a course in biodiversity as a model for study and education. For these supplementary community activities see this link <https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Community-activities.pdf>

## 12. Sustainability and legacy

The project created a considerably positive profile in the local community and among partners and government agencies, this is relating to awareness converted into behaviours by our beneficiaries as they believed that change in their motivations to save biodiversity is essential. We initially focused on science successfully. Of the most important positive experiences/ learned and applied successfully is how to raise environmental awareness. As the Chinese saying goes "I hear and I forget, I see and I remember, I do and I understand". By having people use all their five senses, we were able to reach people of all ages from elementary school students to elderly farmers. We developed sense of exploration and interest among college students. Our team published six research papers already with help of this project and we expect many more papers to come out from our students leaving a legacy and data for scientists to build on. Another lesson learned was the need for long-term engagement and so we applied and received funding from the Darwin Initiative (still ongoing) which will allow us to stay engaged with the community longer. A small poroject from National Geographic Society and this much larger project allowed us to assess and serve community needs better and it is not just in agriculture (we showed them how to plant organically and protect nature and leave farm wildlife corridors etc.), but also we learned that they needed much more in other areas in line with the UN Sustainable Development Goals (e.g. in ecotourism see <https://www.palestinenature.org/research/B48-TWIP-244-Qumsiyeh---Handal.pdf>). There was also an unexpected connection and opportunity that came to our attention because of issues of cultural heritage and the fact that much of the valley is on the UNESCO's list of World Heritage Sites (due to ancient stone terraces, landscapes, and forms of agriculture). Another lesson learned was that researchers must become proactive in defending the areas they research. For example, we wrote a letter to UNESCO when we noted damage to the rich biodiversity area here and we actually got a response from UNESCO. See <https://www.palestinenature.org/conservation/Letter-from-UNESCO.pdf>

### 13. Darwin identity

Darwin's Identity has been visible and promoted throughout all activities, it has been always highlighted in press releases, social media outputs and many more. Here are two videos which talked of the activities by this project

Video 1 Summarized the work <https://youtu.be/Mjdvsk6pkec>

Video 2 In French on Agriculture work that the Palestine Institute for Biodiversity and Sustainability are doing at Al-Makhrour valley (World Heritage Site).

<https://youtu.be/OrCsh1t4aKs> [Funded by National Geographic Society and Darwin Initiative]

Also please note Darwin logo and identity used in the main webpage of the Makhrour Valley project ([almakhrour.palestinenature.org](http://almakhrour.palestinenature.org)) and all the reports linked (see especially those in the tab about) on that web site.



### 14. Safeguarding

This project was approved by our internal system at the university that evaluates it at many angles relating to ethics, education, conservation and more. Initial memo form with the proposal idea are run by our own internal team at Palestine Institute for Biodiversity and Sustainability then passed by for approval/comments by BU Dean of Research, Human Resources, Academic VP, and VP for Finance. Each evaluates based on their expertise. For example Dean of Research checks for needs and fulfilment of guidelines by the research institutional review board. Once this internal process was completed, the interventions and logic and actions related to them are also examined with key stakeholders both national governmental (in this case Ministries of Agriculture and Tourism and the Environmental Quality Authority) and the local ones (municipal and village councils in the four communities in the area) and others (experts, women groups in the villages, cooperatives, and relevant NGOs). During the project as is clear from log frame and project structure, focus groups, workshops and others provide continuous monitoring and evaluation and feedback relevant to safety and ethics issues. These many layers provided and continue to provide safeguards both in preparation and execution of the project activities.

### 15. Project expenditure during the reporting period (1 April 2019–31 March 2020)

Project spend (indicative) in this financial year	2019/20 D+ Grant (£)	2019/20 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs				
Consultancy costs				
Overhead Costs				
Travel and subsistence				

Operating Costs				
Capital items				
Others (Please specify)				
<b>TOTAL</b>				

## Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2019-2020 – if applicable

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
<p><b>Impact</b></p> <p>The semi-natural ecosystems of the southern areas of the West Bank are sustainably maintained with resultant enhancement of Biodiversity conservation, traditional agriculture practices, and socioeconomic development of local people.</p>		<p>Impact is evident in reports published on <a href="https://almakhrour.palestinenature.org/about-us/">https://almakhrour.palestinenature.org/about-us/</a> Further in the publications that impact science knowledge (annex 3) Changes of behaviours had been evident for at least 80 farmers in the area, whom have abandoned chemical usage and refuged to traditional farming techniques, in addition to biodiversity conservation plan and schemes that have been built to constitute the required change for the cumulative impact of this project.</p>	<p>Accomplishing the remaining outputs and outcomes of the third year of the project to approach accomplishment of the impact of our project.</p>
<p><b>Outcome</b></p> <p>By 2021, the Palestinian communities' accessed benefits through valuation/conservation of their ecosystems, reviving traditional farming, and enhancing ecotourism activities at Al-Makhrour valley where at least 344 households will directly benefit</p>	<p>0.1 Baseline study of biodiversity covering the area of 2.6 km<sup>2</sup> core area (5 km<sup>2</sup> with buffer zones) then re-evaluation at end of three years shows preservation or increase of biodiversity (versus the decline that has been going on in the past few years)</p> <p>0.2 Number of households acting in environmentally sensitive ways around their homes increase to 30 households (average 6 members of each household) by the first years and then to 244 households (50% females) by</p>	<p>0.1 Baseline studies had been implemented in the first year and reported in the first year report, details in the outputs section &amp; annexes 5 – 8.</p> <p>0.2 At least 80 households are acting in an environmentally friendly manners whether on agricultural practices or on daily life behaviours after they are well aware of the importance of biodiversity. Annex 13.</p>	<p><b>Activities and outputs of the third year as originally planned (now slightly amended because of delays from Covid-19 which shifted some activity completion to year 3) are detailed under activities for</b></p>

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	<p>year three</p> <p>0.3 By year 3, at least 224 households 80 hh in farming - 50% females) including 80 hhs in festivals (50% females) and 40 hhs in food processing (100% females), 60hh running cooperatives (50% females), 12 hhs running market points (100% females), 32 hhs in eco-tourism (50% females) have developed income generating activities like sustainable agriculture, marketing and ecotourism activities and act as models in their communities</p> <p>0.4 Sustainable agricultural productivity increases at targeted sites where vegetables production increases by 30% of yearly production (estimated between 18-22 tons for 40 dunums per year)</p> <p>0.5 By year 3, at least 10 modules of transferrable knowledge are developed in a manner that</p>	<p>0.3 At least 80 households with approximately 50% females, 25 households have participated in the first festival, 15 females have participated in food processing</p> <p>0.4 training, 75% of them are running cooperatives .Marketing activities of products have been incorporated in a weekly market which is “Nabee’ Alkhayrat weekly market in Beit Jala city” and selling points are to be prepared after the conclusion of the grants. Which shall be augmented by the ecotourism business plan. Annex 13-15</p> <p>0.5 Agricultural productivity increase is evident but quantitative data are still</p>	<p><b>three main outputs below.</b></p>

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	<p>would enhance conservation and sustainability</p> <p>0.6 Reduction of damaging human activities (hunting, logging, trash dumping) in the protected areas by 10% annually from baseline</p>	<p>under processing for the productivity quantities of the farmers are increasing but still need further enhancement please see page 22 of Annex 13</p> <p>0.6 To be implemented in the third year.</p>	
<p><b>Output 1. Inventory and assessment for biodiversity at both habitat and species level are conducted in order to consolidate the scientific data required to propose various forms of conservation management and protection within the project area</b></p>	<p><b>Output 1 level indicators</b></p> <p>1.1 Up to 2.5km<sup>2</sup> of Al-Makhrour valley is surveyed for its biodiversity components at both ecosystem and species levels. This includes 5 field trips/surveys covering the different seasons of the year (total 20 field trips per year). Comprehensive surveys in the first and updating for second project years (2018/2019, 2019/2020) and evaluation surveys in the third project year 2020.</p> <p>1.2 One ecosystem management plan will be</p>	<p><b>Progress on Output 1 level indicators</b></p> <p><b>1.1</b></p> <ul style="list-style-type: none"> <li>Literature Reviews for national and global relevant research documents had been implemented and reported in the first year.</li> <li>More than 20 Field visit reports by project team and reported in the first year</li> <li>Two biodiversity reports that describes the ecosystems, habitats at the Valley, threats and drivers of change, flora and fauna species, conservation values and others, had been implemented and links to the reports are available in the activities section.</li> <li>Ecology, flora, fauna and birds databases including monitoring indicators (see activities for e.g.) data basis had been established and links are available in the first year report.</li> </ul> <p>3-5 publications in scientific journals utilizing data of biodiversity in the targeted areas had been conducted and reported in the first year report.</p> <p>1.2 The biodiversity conservation plan and a report that describes the management plan for the Valley, considering both the landscape, socio-</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	<p>developed for the whole valley using CMP model (Conservation Measures Partnership, 2013) and IUCN relevant guidelines.</p> <p>1.3 Three priority habitats at the Valley, their conservation frameworks and restoration schemes were identified and designed with their assessments and monitoring data sets.</p> <p>1.4 Four town-hall style meetings will be conducted for 40 community members for each targeted locality (total 160 local participants, 50% women) about plans of project development, SWOT analysis for key challenges, environmental remedies and ecological economic potentials</p>	<p>ecological systems, and climate change aspects to be handed to relevant decision makers and stakeholders. See Annex 8.</p> <p>1.3 Done. See Annex 10 for habitat restoration</p> <p>1.4 Done in year 1. See Annex 4</p>	
Activity 1.1 Analyse literature for national and global relevant research documents.		Activity implemented, progress and work implemented for this activity had been reported in the previous reports. Link to report can be found at Annex 5	
Activity 1.2 Initial town-hall style meetings for community members in each targeted locality.		Link to the documents pertaining to this activity is available in the previous report) Annex 4	
Activity 1.3 Conduct biodiversity inventory for Al-Makhrour valley;		Please see detailed data regarding inventory reports Annex 6 and Annex 7	We need to find resources to do new research to compare

<b>Project summary</b>	<b>Measurable Indicators</b>	<b>Progress and Achievements April 2019 - March 2020</b>	<b>Actions required/planned for next period</b>
including comprehensive surveys for ecosystem, habitats and species			and note any changes over the three seasons
Activity 1.4 Prepare baseline evaluation report for ecosystem/biodiversity status at Al-Makhrour Valley (conducted during spring year 2019)		Done and can be seen in annexes 6 and 8	
Activities 1.5 & 1.6 Establish ecology, biodiversity, monitoring databases linked to project webpage (the indicators will be linked to specified area blocks along the valley and specified species population).		All reports are now uploaded on project website at <a href="https://almakhrour.palestinenature.org/about-us/">https://almakhrour.palestinenature.org/about-us/</a> but also on other areas of the website which can be explored at <a href="https://almakhrour.palestinenature.org">https://almakhrour.palestinenature.org</a>	Need to restructure website, edit it better and upload all new data over the next year and more
Activities 1.7 & 1.8 Prepare biodiversity management plan for the Valley & Identify key sensitive habitats along the valley and set their conservation frameworks and restoration schemes		Done, see Annexes 8, 9, and 10	
Activities 1.9 to 1.10 Submit conservation plan, establish a committee, communicate the plan		Done partly except some elements of plan communication shifted to second year (see reports detailed in Annex 8 and Annex 11.	The management plan alluded to will be presented at a main public event (delayed due to Covid-1 but anticipate June/July
Activity 1.11 Restore up to max. 3 Dunums of key habitats where found necessary, the method for restoration will be decided based on the type of pressures and threats affecting the sites.		Done, see link of final restoration report Annex 10	Follow-up and ensure conservation
Activity 1.12 Endline surveys			Endline biodiversity evaluation will be done
Activity 1.13 Three to five Publications		Seven publications done, see Annex 3	More publications will come in the next few months
Activity 1.14 Follow-up report end of project year 3			Will be implemented during year three
<b>Output 2. Economic benefits to the local communities; including women and youth, in proximity to</b>	<b>Output 2 level indicators</b> 2.1 By year 2 (2019), 40 dunums	<b>Progress on Output 2 level indicators</b> <b>Evidence for all the below is in Annex 13</b>	



Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
<p><b>Al-Makhrour Valley are secured through sustainable agriculture and eco-tourism enhancement</b></p>	<p>for 80 farmers (50% women farmers) will be provided green agriculture inputs including 56,000 meters of irrigation pipes (1400m/1dunum), 80 water tanks (1cubic meter), 80 pumps (1horse power), 44,000 vegetable seedlings (1100seedling/dunum) or 240kg seeds (6kg/dunum), 2000 sacks of organic compost (50 sacks/dunum).</p> <p>2.2 A two-day workshop for 20 cooperatives (10 productive coop – at least 3 member each (sell local fresh and processed local products) and 10 consumption coop – at least 3 members each (buy local fresh and processed products)) to build marketing networks and partnerships (contacts will be exchanged).</p> <p>2.3 Two market festivals for Al-Makhrour local products; 40 local</p>	<p>2.1</p> <ul style="list-style-type: none"> <li>• Formulated one committee for traditional farming program from key stakeholders from local communities, Ministry of agriculture in Bethlehem Governorate, and others up to (30% females and trying to increase).</li> <li>• Announced invitation to farmers to apply for selection process for the agriculture intervention</li> <li>• Applications filed by farmers from targeted villages/towns was done</li> <li>• Inspection field visits for sample of farmers before signing MoUs.</li> <li>• List of selected farmers prepared</li> <li>• Signed MoUs with the selected 83 farmers</li> <li>• Ordered of purchase for agricultural inputs perpetually.</li> <li>• 4 Field visit reports per farmer per season (640 visit/year), had been done. (however this was cumbersome)</li> <li>• Evaluation report for vegetables production (expected to produce 1500-2000 kg/dunum), was prepared.</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 done perpetually.</li> </ul> <p>2.2</p> <ul style="list-style-type: none"> <li>• Workshop’s invitation disbursed.</li> <li>• List of attendees and their contacts prepared.</li> <li>• Minutes of meeting and photos documented.</li> <li>• Evaluation sheets filled by attendees and analyzed already.</li> <li>• Follow up report for marketing progress done yearly (years 2019 &amp; 2020), is not done yet and will be implemented in the third year.</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 done perpetually.</li> </ul>	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	<p>farmers/festival (50% female farmers); one selling summer agro-produce (June or July 2019) and the second selling winter agro-produce (February or March 2020)</p> <p>2.4 Mark the Al-Makhrour visitors path by installing 20 arrow signs, 20 plant-info signs and 2 maps with some volunteer cleaning works along the Valley's trail.</p> <p>2.5 Four sub-grants for 4000 (£) each are given to four existing/initiated women business enterprises (an average 3 women members per enterprise) for market local products at four targeted localities</p>	<p>2.3</p> <ul style="list-style-type: none"> <li>• Fees for renting a venue and setting the bazar area for the festivals, paid</li> <li>• Order of purchase for goods for setting the festival (tents, chairs &amp; tables, packaging material) had been implemented</li> <li>• List of farmers participating at each festival was prepared.</li> <li>• Field visit reports and photos had been documented.</li> <li>• Follow up report for the progress and impact of the festivals is yet to be prepared</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 done perpetually.</li> </ul> <p>2.4</p> <ul style="list-style-type: none"> <li>• Formulated one committee for eco-tourism program from key stakeholders from local communities Ministry of tourism &amp; antiquities in Bethlehem Governorate, and others (40% females).</li> <li>• Specifications and order of purchase for signs, and maps had been implemented</li> <li>• Field visit report for installation and cleaning works at Al-Makhrour valley including photos is not yet prepared completely because the installation of the signs is not concluded yet, however the cleaning was implemented</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 done perpetually.</li> </ul> <p>2.5</p> <ul style="list-style-type: none"> <li>• Announcements at local authorities for the sub-grant had been implemented.</li> <li>• Application forms for sub-grant were filed and submitted to our partner ICP.</li> <li>• Evaluation reports for selection ensuring the integrity and governance of the process is documented.</li> </ul>	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
		<ul style="list-style-type: none"> <li>• List of 12 women for initiating business selling points (each 3 will start a selling point at their village) is prepared upon a process.</li> <li>• Signed MoUs with women to start the four initiatives is concluded.</li> <li>• Four market selling points' business plans for marketing the valleys agricultural, cultural, and touristic products, Business plans are prepared with the help of a consultant and annexed.</li> <li>• Government registration certificates, is not prepared yet, but will be sought for after the initiation.</li> <li>• Follow up reports every year to measure the success of this initiative.</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 done perpetually.</li> </ul>	
Activities from 2.1 to 2.4		Activities implemented, and reported in the earlier reporting period. See Annex 4	
Activity 2.5 Purchase agricultural inputs		The purchase requests are ordered in Sep 2019 and Jan 2020 for winter and summer seasons respectively. The ordered materials for 2019 winter are (local seeds, seedlings, bulbs, and trees) while local seedlings and compost are requested for 2020 summer season, where the order for summer is all seedlings to avoid the germination problem, easier and less time consuming than growing from seed. Irrigation networks are functional as installed and reported before. Water tanks are on the ground in the fields and operational as reported. PMNH team and a representative of ministry of agriculture conducted an inspection	Purchases will be made for next seasons also for permanent items like water tanks

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
		<p>process to the received seedlings in 20.11.2019. Before their distribution to farmers. More than 200 sacks of compost had been handed to farmers and the project team had been overseeing the deployment on land, while promoting better agricultural practices, this for the last two seasons See Annex 13</p>	
<p>Activity 2.6. &amp; Activity 2.8 Land preparations, weed removal and organic compost additions for selected land-farms &amp; conduct 4 follow up field visits per farmer per season</p>		<p>At least 170 field visits were performed, to follow up the land agricultural status and the farmers who haven't cultivated their crops because of late precipitation season, which affected in general of Palestine summer season for this year (2019) and its winter season. See Annex 13</p>	<p>This activity is ongoing also for year 3</p>
<p>Activity 2.7 Distribution of agricultural inputs and cultivation of diverse summer and winter vegetable crops</p>		<p>Agricultural inputs had been quantified, and decided upon, concerning kinds of seeds and transplants in partnership with farmers, whom inputs were the baseline for deciding list of quantities and kinds. See Annex 13</p>	<p>This activity is ongoing also for year 3</p>
<p>Activity 2.8 Conduct 4 follow up field visits per farmer per season (320 visit/ season), supported with report</p>		<p>Field visits were of diverse purposes, reported with Activity 2.6 Many crops in the fields are healthy except poor to zero germination of most of the seeds, which reflects on the productivity for 2019-2020 winter season.</p>	<p>This activity is ongoing also for year 3</p>
<p>Activity 2.9 Conduct two cross village exchange and demonstration visits (during first three cultivation seasons)</p>		<p>Implemented and manifested in the activities section. See <a href="https://almakhrour.palestinenature.org/">https://almakhrour.palestinenature.org/</a></p>	<p>More cross-village exchanges will be done in year 3</p>

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
		<a href="https://www.darwinplus.org/wp-content/uploads/2020/05/Annex-13A.pdf">wp-content/uploads/2020/05/Annex-13A.pdf</a>	
Activity 2.10 Evaluation report for summer /winter vegetables production		Conducted and productivity report is available at <a href="https://bit.ly/2WA7qNU">https://bit.ly/2WA7qNU</a> and p. 22 in Annex 13	This activity is ongoing also for year 3
Activity 2.11 – Conduct first/second festival during harvesting period of summer/winter cultivation seasons.		First festival implemented <i>Links for festival media coverage:</i> <a href="https://www.bethlehem.edu/news/2019/nabe-khayrat-icp-pmnh?utm_source=dvr.it&amp;utm_medium=facebook">https://www.bethlehem.edu/news/2019/nabe-khayrat-icp-pmnh?utm_source=dvr.it&amp;utm_medium=facebook</a> <a href="https://www.facebook.com/PalestineTv/videos/389064305350142">https://www.facebook.com/PalestineTv/videos/389064305350142</a> <a href="https://www.facebook.com/RadioBaladna95.7/photos/a.2735142279858904/2735147443191721/?type=3&amp;theater">https://www.facebook.com/RadioBaladna95.7/photos/a.2735142279858904/2735147443191721/?type=3&amp;theater</a> <a href="https://www.facebook.com/mawwalfm/videos/326684311476889/UzpfSTEzNTk5NzIzNjQ1NzYyNzoyODQ1NTg3ODQ1NDk4NTM5/">https://www.facebook.com/mawwalfm/videos/326684311476889/UzpfSTEzNTk5NzIzNjQ1NzYyNzoyODQ1NTg3ODQ1NDk4NTM5/</a> <i>See some pictures of the festival.</i> <a href="http://bit.ly/31QECRD">http://bit.ly/31QECRD</a> .	Second festival will be done in third year
Activity 2.12. Prepare the follow up report for the success and lessons learnt from the festival		Here are lessons learned <a href="https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Annex-12-Lessons-learn-from-the-Festival.pdf">https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Annex-12-Lessons-learn-from-the-Festival.pdf</a>	Report on 3 <sup>rd</sup> year (second) festival will be also written
Activity 2.13. Conduct 2 day workshop for cooperatives' partnerships and business enhancement		A two-day' workshop about <b>cooperatives' partnerships and business enhancement</b> was conducted on 11 + 12 June 2019 at	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
		PMNH premises, details are on the activities section	
Activity 2.14. Prepare the follow up report for marketing progress of the selected cooperatives			A template will be produced and communicated with producer cooperatives, the template's role is to establish a tracking sheet for the monitoring and communication of the marketing progress, focusing on products, prices, places, sales, promotion techniques, however marketing efforts had been halted in the last two months because of the Covid-19 pandemic.
Activity 2.15. Formulation of one committee for eco-tourism program from key stakeholders from local communities		The committee had been established and this had been reported in earlier report, see Annex 14	
Activity 2.16. Study the Valley's path and identify the best places to mark the visitors' path		Activity implemented, progress and work implemented for this activity had been reported above under outcomes	
Activity 2.17. Conduct cleaning works and install 20 arrow signs, 20 plant-info signs and 2 maps with some volunteer works along the Valley's visitors' path		A cleaning voluntary campaign was carried out with participation of more than 15 from team, farmers, evidence is available in the first year report.	
Activity 2.19. Provide four sub-grants (for £4000 each) for four existing/initiated women business enterprises		Implemented and waiting for the conclusion of the procurement after the approval of the change request which emerged after the Covid-19 pandemic	Shifted to third year see justification approved here <a href="https://bit.ly/2A6SRtp">https://bit.ly/2A6SRtp</a>

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
Activity 2.20 & Activity 2.21: Follow-up and evaluation reports for initiated SMEs.		hit the area.	will be implemented in third year.
<b>Output 3. Raise awareness of and build capacities of local communities and stakeholders to better manage their natural resources, support conservation measures and benefit from sustainable agricultural and eco-tourism interventions while impacting the national legislation and involving both females and youth.</b>	<b>Output 3 level indicators</b> 3.1 One day workshop for 20 main stakeholders from targeted localities, governmental bodies mainly environmental quality authority, ministry of agriculture, and ministry of tourism & antiquities. And media to present the Valley's biodiversity management plans to be considered at legislative level. 3.2 Four 1-day workshop to emphasize marketing networks, initiation of small business enterprises, and methods of governance and of sustaining their businesses for farmers and relevant cooperatives. 3.3 Four 2-days training sessions for best sustainable farming practices (organic, permaculture, managing the farm, etc.) (80 farmers in total, 50% women, 20 farmers per workshop)	<b>Progress on Output 3 Indicators</b> 3.1 <ul style="list-style-type: none"> <li>• Workshop's invitation, agenda, presentation, are distributed document (biodiversity plan report prepared by the project earlier),</li> <li>• Minutes of meeting including photos, list of attendees, prepared see annexed.</li> <li>• Pre and post evaluation reports reflecting on the knowledge base concerning the status of biodiversity at targeted area and the stakeholders' willingness to adopt the plan and implement it later on the ground, is implemented.</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 prepared and submitted annually.</li> </ul> 3.2 <ul style="list-style-type: none"> <li>• Workshop's invitation, agenda, presentation, and educational material were prepared, disseminated and announced.</li> <li>• Minutes of meeting including photos, list of attendees, had been prepared.</li> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects and highlighting the benefits they gained from this workshop in their business, implemented and analysed. See annexed please.</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 prepared and submitted perpetually.</li> </ul> 3.3 <ul style="list-style-type: none"> <li>• Training invitation, agenda and presentation (including training material), had been prepared &amp; disseminated.</li> </ul>	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	<p>3.4 Four 2-days training sessions for best practices in conserving biodiversity and maintaining the eco-system services (theoretical and practical at the valley) (60hhs in total, 15 households per village) (50% women)</p> <p>3.5 One-day training session for women entrepreneurs who has initiated their business selling points during the project (12 women in total)</p> <p>3.6 Two 2-days food processing training sessions for women</p>	<ul style="list-style-type: none"> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects; highlighting the benefits they gained from this training in their farming practices, implemented and analysed.</li> <li>• Attendees, educational material, photos, had been documented. See annexed.</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 are prepared and submitted perpetually.</li> </ul> <p>3.4</p> <ul style="list-style-type: none"> <li>• Training invitation, agenda and presentation (including training material), had been prepared &amp; disseminated.</li> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects; highlighting the benefits they gained from this training in their farming practices, implemented and analysed.</li> <li>• Attendees, educational material, photos, had been documented. See annexed.</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 are prepared and submitted perpetually.</li> </ul> <p>3.5</p> <ul style="list-style-type: none"> <li>• Training invitation, agenda and presentation, prepared &amp; disseminated.</li> <li>• Business plan for each selling point prepared. See annexed.</li> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects; highlighting the benefits they gained from this training in their business,</li> <li>• list of attendees, educational material, photos,</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 prepared and submitted perpetually.</li> </ul>	



Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	<p>headed households (one in first year 2019 and one in second year 2020 of the project) (40 women in total, 5households/village/year, (100% women).</p> <p>3.7 Two-days workshop for alternative tourism operators (10 representatives – 2 persons each) and 12 representatives of the local communities (3 members per locality) that works in the tourism sector (50% women)</p> <p>3.8 Ten meetings for 5 schools located in Bethlehem District to present the project, the valley, raise environmental awareness, and create school environment clubs (20 students each, 50% females).</p> <p>3.9 At least 106 social media</p>	<p>3.6</p> <ul style="list-style-type: none"> <li>• Training invitation, agenda and presentation (including training material), had been prepared &amp; disseminated.</li> <li>• Purchase for food processing tools had been implemented.</li> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects; highlighting the benefits they gained from this training in their farming practices, implemented and analysed.</li> <li>• Attendees, educational material, photos, had been documented. See annexed.</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 are prepared and submitted perpetually.</li> </ul> <p>3.7</p> <ul style="list-style-type: none"> <li>• Workshop invitation, agenda, list of invitees and educational material in best method for successful eco-tourism plan and business enterprises was prepared and disseminated.</li> <li>• Tourism business plan for the valley is set by both parties (tourism operators and local communities with benefit sharing concept), implemented by a consultant. see</li> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects; highlighting the benefits they gained from this training in their business, is not done yet.</li> </ul> <p>3.8</p> <ul style="list-style-type: none"> <li>• Letter of cooperation from Ministry of Education and higher Education (MEHE), had been sent and approved by the ministry.</li> <li>• Letter of invitation for the schools had been sent.</li> <li>• Educational material and modular</li> <li>• Meetings minutes of meetings, photos, list of students prepared.</li> <li>• Schools' environmental clubs had been established but their evaluation is not prepared yet.</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021 is prepared and submitted perpetually.</li> </ul>	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	<p>announcements, 15 newspaper news, and 4 TV sessions, a website for the valley will be disseminates</p> <p>3.10 Up to 2500 copies of brochures for education about the valley, its trail and potential conservation and development</p>	<p>3.9 At least 50 social media events announced, 5 newspapers news, but the TV sessions are not done yet. The website is build and will be updated perpetually.</p> <p>3.10 The brochures are to be implemented in the third year.</p>	
Activity 3.1 Conduct one-day workshop for key stakeholders to present the Valley's biodiversity management plan			Will be implemented in the third year. When the biodiversity conservation management plan (Annex 8) is publicly presented and final agreement to implement it worked out with Ministry of Tourism, Environmental Quality Authority, and Ministry of Agriculture.
Activity 3.2 Conduct four one-day workshop to enhance marketing networks		Two workshops were implemented	Two workshops will be implemented next year.
Activity 3.3 Conduct two-days' workshop for alternative tourism operators		Activity implemented, and reported in the earlier reporting period see outputs above page 11.	
Activity 3.4 Conduct four two-days training sessions for best sustainable farming practices, permaculture, organic farming		This activity was implemented via four workshops in Husan, Battir, Al-Walajah and Beit Jala (see below table for details the training delivered using mixed methodology of practical coaching on the land and some theoretical instruction). See p. 38 in	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
		Annex 13	
Activity 3.5 Conduct four two-days training sessions for best practices in conserving biodiversity		Four groups of farmers from the targeted villages attended two days workshops (2 targeted areas per day) the workshops conducted aimed at raising awareness of biodiversity conservation practices and how to include them in agricultural practices. Details are available in the activities section. See p 35-36 in Annex 13	
Activity 3.6 Conduct one-day training session for women entrepreneurs		A one day workshop about <b>Selling Point</b> was conducted on Monday 9 December 2019 at ICP main building <a href="https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf">https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf</a>	
Activity 3.7 Conduct two two-days food processing training sessions		Two days workshop about <b>Food Processing</b> was conducted, the first technical session on Monday 16 December 2019 at ICP main building while the practical session conducted on Tuesday 17 December 2019 at Turathuna Al-Asil Association / Beit Jala. See 3.7 under this file <a href="https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf">https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Women-empowerment.pdf</a>	
Activity 3.8 Ten meetings for 5 schools located in Bethlehem District to present the project, the valley		A committee formed of members of the project team in addition to the public relations coordinator of PMNH had approached the ministry of education in	More will be done in 3 <sup>rd</sup> year

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
		<p>Palestine and coordinated to approach the schools and deliver the message required to school children, details are available with evidence in the activities. See <a href="https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Educational-Awareness-Workshops.pdf">https://almakhrour.palestinenature.org/wp-content/uploads/2020/05/Educational-Awareness-Workshops.pdf</a></p>	
Activity 3.9 Finalized 10 modular that are based on project studies			Work on process and will be finalized in the coming reporting periods.
Activity 3.10 Follow up report for the school environmental clubs at the selected school			Will be written and reported when the meetings are concluded for this year.
Activity 3.11 Disseminate up to 106 social media announcements, 15 newspaper news		<p>During this reporting period 55 posts on social media were published by PMNH and stakeholders, so far, including social media platforms from the four communities covering the different activities of the project Here are two examples from facebook <a href="https://bit.ly/3cgK4Dy">https://bit.ly/3cgK4Dy</a> and <a href="https://bit.ly/2yDxDTE">https://bit.ly/2yDxDTE</a> Also press releases for the trainings and the festival had been placed in two famous local newspapers, and 2 announcements on news websites, like survey conducted on mushrooms see link <a href="https://bit.ly/2zpOvNT">https://bit.ly/2zpOvNT</a> , and a workshop on ecotourism see link</p>	More will be done in year 3

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
		<a href="https://bit.ly/2xO3a4Q">https://bit.ly/2xO3a4Q</a> . many more of these media coverage will be demonstrated in the coming reporting periods more	
Activity 3.12 Conduct 4 TV sessions to discuss on air the different subjects the project is dealing with and supporting.		TV sessions produced: 1) “our respect for our environment is our respect for ourselves” <a href="http://youtu.be/-yA9il9GVYk">http://youtu.be/-yA9il9GVYk</a> , 2) “Environmental awareness for children ( <a href="http://youtu.be/oxxUqk4 -PA">http://youtu.be/oxxUqk4 -PA</a> ), 3) Festival highlighting the project and its impact ( <a href="http://bit.ly/2MY7qwh">http://bit.ly/2MY7qwh</a> ).	More TV sessions/videos will be produced
Activity 3.13 Prepare a webpage for the project under the PIBS- BU website to present all project accomplishments		The website is operational and is being updated periodically, link <a href="https://almakhrour.palestinature.org">https://almakhrour.palestinature.org</a>	Mopre data uploads on it especially reporting on post intervention results
Activity 3.14 Prepare and Print brochure for the project area			Will be implemented in the third year of the project.
Activity 3.15 Conduct follow up surveys for sample of local households (20%of total beneficiaries (of which 50% females)		Good progress on this. Details are described in the activities and output sections and in the agriculture report (Annex 13)	This will intensify in year 3 to measure changes in production and consumption by households

**Annex 2: Project’s full current logframe as presented in the application form (unless changes have been agreed) - if applicable**

*N.B. if your application’s logframe is presented in a different format in your application, please transpose into the below template. Please feel free to contact [Darwin-Projects@Itsi.co.uk](mailto:Darwin-Projects@Itsi.co.uk) if you have any questions regarding this.*

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Impact: The semi-natural ecosystems of the southern areas of the West Bank are sustainably maintained with resultant enhancement of Biodiversity conservation, traditional agriculture practices, and socioeconomic development of local people.</b></p> <p>(Max 30 words)</p>			
<p><b>Outcome:</b> (Max 30 words)</p> <p><b>By 2021, the Palestinian communities’ accessed benefits through valuation/conservation of their ecosystems, reviving traditional farming, and enhancing ecotourism activities at Al-Makhrour valley where at least 344 households will directly benefit</b></p>	<p>0.1 Baseline study of biodiversity covering the area of 2.6 km<sup>2</sup> core area (5 km<sup>2</sup> with buffer zones) then re-evaluation at end of three years shows preservation or increase of biodiversity (versus the decline that has been going on in the past few years)</p> <p>0.2 Number of households acting in environmentally sensitive ways around their homes increase to</p>	<ul style="list-style-type: none"> <li>• Baseline (year 2019) and end line (2020) reports for ecology/biodiversity components,</li> <li>• 3-5 scientific publications,</li> <li>• Ecology, flora, fauna and birds databases including monitoring indicators (see activities for e.g.)</li> <li>• 20 Field visit reports including photos and maps</li> <li>• # of field survey equipment</li> <li>• Maps delineating the valley, forested area surrounding it and semi-natural areas inside the village boundaries</li> <li>• 5 project progress reports (one every six months); from September 2018 to February 2021.</li> <li>• Final technical and financial reports</li> </ul> <ul style="list-style-type: none"> <li>• 1 baseline and 2 follow up surveys (one per year) of sample of local households (20%of total</li> </ul>	<p>Political turmoil does not interfere in project implementation; (the project has flexibility in shifting locations when one community has disturbances).</p> <p>Staff and workers employed by the project are living in Bethlehem Governorate to ensure their availability during needed periods during the project implementation despite any political turmoil</p> <p>Assume supplies and equipment remain possible to be purchased with few restrictions.</p> <p>Continued cooperation of local and national authorities.</p>

	<p>30 households (average 6 members of each household) by the first years and then to 244 households (50% females) by year three</p>	<p>beneficiaries (of which 50% females) targeted per year) by staff and volunteers</p> <ul style="list-style-type: none"> <li>• Follow up reports every year; to measure impact of the project including environmentally sensitive practices (includes findings of follow up surveys)</li> <li>• Field visit reports by project staff</li> <li>• 5 project progress reports (one every six months); from September 2018 to February 2021.</li> <li>• Final technical and financial reports</li> </ul>	
	<p>0.3 By year 3, at least 224 households 80 hh in farming - 50% females) including 80 hhs in festivals (50% females) and 40 hhs in food processing (100% females), 60hh running cooperatives (50% females), 12 hhs running market points (100% females), 32 hhs in eco-tourism (50% females) have developed income generating activities like sustainable agriculture, marketing and ecotourism activities and act as models in their communities</p>	<ul style="list-style-type: none"> <li>• Follow up report at end of the project (year 3); to measure impact of the project including generation of income where number of M&amp;E questions are embedded.</li> <li>• Maps locate the targeted farms, festival, selling market points, eco-tourism visitors' path, etc.</li> <li>• 5 project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Project audit report every year.</li> <li>• Final technical and financial audit reports</li> </ul>	
	<p>0.4 Sustainable agricultural productivity increases at targeted sites where vegetables production increases by 30% of yearly production (estimated</p>	<ul style="list-style-type: none"> <li>• Follow up reports every year; to measure impact of the project including increase in vegetables production at targeted sites where number of M&amp;E questions</li> </ul>	

	<p>between 18-22 tons for 40 dunums per year)</p>	<p>are embedded</p> <ul style="list-style-type: none"> <li>• Project audit report every year.</li> <li>• Field visit reports by project staff</li> <li>• 5 project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial audit reports</li> </ul>	
	<p>0.5 By year 3, at least 10 modules of transferrable knowledge are developed in a manner that would enhance conservation and sustainability</p>	<ul style="list-style-type: none"> <li>• Finalized modular that are based on project studies in different project field including composting, traditional farming, eco-tourism, biodiversity and conservation, advanced marketing, etc. that is transferrable to people documented in writings and via photos.</li> <li>• Final project technical report</li> </ul>	
	<p>0.6 Reduction of damaging human activities (hunting, logging, trash dumping) in the protected areas by 10% annually from baseline</p>	<ul style="list-style-type: none"> <li>• Baseline report to measure impact of damaging human activities on the environment of the targeted site; upon conducting an initial assessment for major indicator reflecting on the mentioned issues.</li> <li>• Follow up report at end of the project (year 3); to measure impact of the project including reduction of damaging activities where number of M&amp;E questions are embedded</li> <li>• Final technical and financial audit reports</li> </ul>	



<p><b>Outputs:</b></p> <p>1. Inventory and assessment for biodiversity at both habitat and species level are conducted in order to consolidate the scientific data required to propose various forms of conservation management and protection within the project area</p>	<p>1.1 Up to 2.5km<sup>2</sup> of Al-Makhrour valley is surveyed for its biodiversity components at both ecosystem and species levels. This includes 5 field trips/surveys covering the different seasons of the year (total 20 field trips per year). Comprehensive surveys in the first and updating for second project years (2018/2019, 2019/2020) and evaluation surveys in the third project year 2020.</p>	<ul style="list-style-type: none"> <li>• Literature Reviews for national and global relevant research documents</li> <li>• 20 Field visit reports by project team</li> <li>• Two biodiversity reports that describes the ecosystems, habitats at the Valley, threats and drivers of change, flora and fauna species, conservation values and others</li> <li>• Ecology, flora, fauna and birds databases including monitoring indicators (see activities for e.g.)</li> <li>• 3-5 publications in scientific journals utilizing data of biodiversity in the targeted areas</li> </ul>	<p>Potential travel restrictions could delay arrival via alternative roads (we need flexibility in timing of project activities).</p> <p>Women participation in town hall meetings, interviews with stakeholders, or committee formulated for restoration, depends on availability of women in related positions.</p>
	<p>1.2 One ecosystem management plan will be developed for the whole valley using CMP model (Conservation Measures Partnership, 2013) and IUCN relevant guidelines</p>	<ul style="list-style-type: none"> <li>• 12 Interviews with stakeholders (4 village councils, 4 GOV. Bodies, and 4 local organizations) – questionnaires, attendance and photos.</li> <li>• One report that describes the management plan for the Valley, considering both the landscape, socio-ecological systems, and climate change aspects to be handed to relevant decision makers and stakeholders. Data disaggregated by gender when appropriate</li> </ul>	
	<p>1.3 Three priority habitats at the Valley, their conservation</p>	<ul style="list-style-type: none"> <li>• Formulation of one committee for restoration actions from key stakeholders from local</li> </ul>	

	<p>frameworks and restoration schemes were identified and designed with their assessments and monitoring data sets</p>	<p>communities, EQA and MoA directorates in Bethlehem Governorate, and others (40% females).</p> <ul style="list-style-type: none"> <li>• 6 field visits for selected habitats</li> <li>• One report that describes the conservation values including the priority habitats, their conservation frameworks and restoration schemes (where necessary), and list of monitoring datasets (linked to database mentioned in 1.1).</li> <li>• Up to 3 dunums will be restored, the method for restoration will be decided based on the type of pressures and threats affecting the sites.</li> </ul>	
	<p>1.4 Four town-hall style meetings will be conducted for 40 community members for each targeted locality (total 160 local participants, 50% women) about plans of project development, SWOT analysis for key challenges, environmental remedies and ecological economic potentials</p>	<ul style="list-style-type: none"> <li>• Media coverage, newspaper announcement, list of attendees, photos</li> <li>• a report about main findings and recommendations; data disaggregated by gender</li> </ul>	
<p><b>2. Economic benefits to the local communities; including women and youth, in proximity to Al-Makhrour</b></p>	<p>2.1 By year 2 (2019), 40 dunums for 80 farmers (50% women farmers) will be provided green agriculture</p>	<ul style="list-style-type: none"> <li>• Formulation of one committee for traditional farming program from key stakeholders from local</li> </ul>	

Valley are secured through sustainable agriculture and eco-tourism enhancement	inputs including 56,000 meters of irrigation pipes (1400m/1dunum), 80 water tanks (1cubic meter), 80 pumps (1horse power), 44,000 vegetable seedlings (1100seedling/dunum) or 240kg seeds (6kg/dunum), 2000 sacks of organic compost (50 sacks/dunum).	<p>communities, MoA directorate in Bethlehem Governorate, and others (40% females).</p> <ul style="list-style-type: none"> <li>• Announcement inviting farmers to apply for selection process for the agriculture intervention</li> <li>• Applications filed by farmers from targeted villages/towns</li> <li>• Inspection field visits for sample of farmers before signing MoUs.</li> <li>• List of selected farmers</li> <li>• Signed MoUs with the selected 80 farmers</li> <li>• Order of purchase for agricultural inputs</li> <li>• 4 Field visit reports per farmer per season (640 visit/year),</li> <li>• evaluation report for vegetables production (expected to produce 1500-2000 kg/dunum),</li> <li>• project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial audit reports</li> </ul>	<p>Getting “buy-in” by local people.</p> <p>(Willingness and interest of local people is a key stone that the project rely on and hence the team will always work to secure this factor especially during the selection process of beneficiaries for the different interventions and through the formulated project committees)</p> <p>Cooperation of local authorities of targeted localities (town councils and municipalities) while implementing the project activities. (The applicant collected letters of support during the planning of the project local authorities, emphasizing their continuous involvement in the project activities, formulated committees and follow ups))</p>
	2.2 A two-day workshop for 20 cooperatives (10 productive coop – at least 3 member each (sell local fresh and processed local products) and 10 consumption coop – at least 3 members each (buy local fresh and processed products)) to build marketing networks and partnerships (contacts will be exchanged).	<ul style="list-style-type: none"> <li>• Workshop’s invitation,</li> <li>• list of attendees and their contacts,</li> <li>• Minutes of meeting and photos,</li> <li>• Evaluation sheets filled by attendees</li> <li>• follow up report for marketing progress done yearly (years 2019 &amp; 2020)</li> </ul>	

		<ul style="list-style-type: none"> <li>• project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial audit reports</li> </ul>	
	2.3 Two market festivals for Al-Makhroul local products; 40 local farmers/festival (50% female farmers); one selling summer agro-produce (June or July 2019) and the second selling winter agro-produce (February or March 2020)	<ul style="list-style-type: none"> <li>• Fees for renting a venue and setting the bazar area for the festivals,</li> <li>• Order of purchase for goods for setting the festival (tents, chairs &amp; tables, packaging material)</li> <li>• list of farmers participating at each festival,</li> <li>• field visit reports and photos,</li> <li>• Follow up report for the progress and impact of the festivals,</li> <li>• project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial audit reports</li> </ul>	
	2.4 Mark the Al-Makhroul visitors path by installing 20 arrow signs, 20 plant-info signs and 2 maps with some volunteer cleaning works along the Valley's trail.	<p>2 Formulation of one committee for eco-tourism program from key stakeholders from local communities, MoTA directorate in Bethlehem Governorate, and others (40% females).</p> <p>3 Specifications and order of purchase for signs, and maps</p> <p>4 Field visit report for installation and cleaning works at Al-Makhroul valley including photos</p> <p>5 project progress reports (one</p>	

		<p>every six months); from September 2018 to February 2021</p> <p>6 Final technical and financial audit reports</p>	
	<p>2.5 Four sub-grants for 4000 (£) each are given to four existing/initiated women business enterprises (an average 3 women members per enterprise) for market local products at four targeted localities</p>	<p>7 Announcements at local authorities for the sub-grant,</p> <p>8 Application forms for sub-grant request,</p> <p>9 Evaluation reports for selection ensuring the integrity and governance of the process</p> <p>10 Signed MoUs with 12 women (including women cooperatives) to start the four initiatives.</p> <p>11 Four market selling points' business plans for marketing the valleys agricultural and cultural and touristic products,</p> <p>12 Government registration certificates,</p> <p>13 Follow up reports every year to measure the success of this initiative.</p> <p>14 project progress reports (one every six months); from September 2018 to February 2021</p> <p>15 Final technical and financial audit reports</p>	

<p><b>3. Raise awareness of and build capacities of local communities and stakeholders to better manage their natural resources, support conservation measures and benefit from sustainable agricultural and eco-tourism interventions while impacting the national legislation and involving both females and youth</b></p>	<p>3.1 One day workshop for 20 main stakeholders from targeted localities, governmental bodies mainly EQA, MoA, and MoTA and media to present the Valley's biodiversity management plans to be considered at legislative level.</p>	<ul style="list-style-type: none"> <li>• Workshop's invitation, agenda, presentation, and distributed document (biodiversity plan report prepared by the project earlier),</li> <li>• Minutes of meeting including photos, list of attendees,</li> <li>• Pre and post evaluation reports reflecting on the knowledge base concerning the status of biodiversity at targeted area and the stakeholders' willingness to adopt the plan and implement it later on the ground,</li> <li>• project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial audit reports</li> </ul>	<p>Locals including schools willingness to participate in training sessions and workshops to learn about local and national environment, biodiversity conservation, and business interventions for better livelihoods (the project will initiate this activity through Ministry of Education and Higher Education)</p> <p>The trainees buy-in the training educational materials, orientations and recommendations (the project will ensure motivation and engagement of all participants)</p> <p>Some of the targeted farmers might change by the project team during the project implementation; only in case they show inefficiency in delivery aimed at outputs. The project team will perform the selection upon the same set of criteria; used at the beginning of the project.</p>
	<p>3.2 Four 1-day workshop to emphasize marketing networks, initiation of small business enterprises, and methods of governance and of sustaining their businesses for farmers and relevant cooperatives</p>	<ul style="list-style-type: none"> <li>• Workshop's invitation, agenda, presentation, and educational material</li> <li>• Minutes of meeting including photos, list of attendees,</li> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects and highlighting the benefits they gained from this workshop in their business,</li> <li>• project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial</li> </ul>	

		audit reports	
	3.3 Four 2-days training sessions for best sustainable farming practices (organic, permaculture, managing the farm, etc.) (80 farmers in total, 50% women, 20 farmers per workshop)	<ul style="list-style-type: none"> <li>• Training invitation, agenda and presentation (including training material),</li> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects; highlighting the benefits they gained from this training in their farming practices,</li> <li>• attendees, educational material, photos,</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial audit reports</li> </ul>	
	3.4 Four 2-days training sessions for best practices in conserving biodiversity and maintaining the ecosystem services (theoretical and practical at the valley) (60hhs in total, 15 hhs per village) (50% women)	<ul style="list-style-type: none"> <li>• Training invitation, agenda and presentation (including training material),</li> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects; the level of valuation for biodiversity and the importance of tis conservation at targeted area, and best practices to conduct conservation practices,</li> <li>• list of attendees, educational</li> </ul>	

		<ul style="list-style-type: none"> <li>material, photos,</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial audit reports</li> </ul>	
	<p>3.5 One-day training session for women entrepreneurs who has initiated their business selling points during the project (12 women in total)</p>	<ul style="list-style-type: none"> <li>• Training invitation, agenda and presentation</li> <li>• Business plan for each selling point</li> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects; highlighting the benefits they gained from this training in their business,</li> <li>• list of attendees, educational material, photos,</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial audit reports</li> </ul>	
	<p>3.6 Two 2-days food processing training sessions for women headed households (one in first year 2019 and one in second year 2020 of the project) (40 women in total, 5hhs/village/year, (100% women))</p>	<ul style="list-style-type: none"> <li>• Training invitation, agenda and presentation (theoretical session)</li> <li>• Order of purchase for food processing tools</li> <li>• Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects; highlighting the benefits</li> </ul>	



		<p>the women gained from this training especially in terms of quality control and good packaging,</p> <ul style="list-style-type: none"> <li>• list of attendees, educational material, photos,</li> <li>• Project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial audit reports</li> </ul>	
	<p>3.7 Two-days workshop for alternative tourism operators (10 representatives – 2 persons each) and 12 representatives of the local communities (3 members per locality) that works in the tourism sector (50% women)</p>	<p>3 Workshop invitation, agenda, list of invitees and educational material in best method for successful eco-tourism plan and business enterprises</p> <p>4 Tourism business plan for the valley is set by both parties (tourism operators and local communities with benefit sharing concept),</p> <p>5 Pre and post evaluation reports reflecting on the knowledge base of participates in relevant aspects; highlighting the benefits they gained from this workshop in their business,</p> <p>6 list of attendees and their contacts,</p> <p>7 Minutes of meeting and photos,</p> <p>8 follow up report for eco-tourism progress done yearly (years 2019 &amp; 2020)</p> <p>9 project progress reports (one</p>	

		<p>every six months); from September 2018 to February 2021</p> <p>10 Final technical and financial audit reports</p>	
	<p>3.8 Ten meetings for 5 schools located in Bethlehem District to present the project, the valley, raise environmental awareness, and create school environment clubs (20 students each, 50% females).</p>	<p>11 Letter of cooperation from Ministry of Education and higher Education (MEHE)</p> <p>12 Letter of invitation for the schools</p> <p>13 Educational material and modular</p> <p>14 Meetings minutes of meetings, photos, list of students</p> <p>15 Schools' environmental clubs evaluation and follow up reports</p> <p>16 project progress reports (one every six months); from September 2018 to February 2021</p> <p>17 Final technical and financial audit reports</p>	
	<p>3.9 At least 106 social media announcements, 15 newspaper news, and 4 TV sessions, a website for the valley will be disseminates</p>	<ul style="list-style-type: none"> <li>• The announcements and news documented in progress reports,</li> <li>• fees for newspapers, development of the website and TV sessions upon bidding procedure).</li> </ul>	

	<p><b>3.10</b> Up to 2500 copies of brochures for education about the valley, its trail and potential conservation and development opportunities</p>	<ul style="list-style-type: none"> <li>• the brochure print outs</li> <li>• Fees for montage and print outs</li> <li>• project progress reports (one every six months); from September 2018 to February 2021</li> <li>• Final technical and financial audit reports</li> </ul>	
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**Activities** (each activity is numbered according to the Output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

0.1 Recruit project coordinator, scientific researchers, consultants, and local field staff

0.2 Project start up workshop inviting relevant stakeholders including GOVs., NGOs, Universities, Local authorities (village councils/municipalities), tourism operator, cooperatives, media, and many others at Bethlehem University.

**Output 1: Inventory and assessment for biodiversity at both habitat and species level are conducted in order to consolidate the scientific data required to propose various forms of conservation management and protection within the project area**

1.1 Analyse literature for national and global relevant research documents. This includes a desk study and collection of data of relevance to the project and its outputs.

1.2 Initial town-hall style meetings for community members in each targeted locality about plans of project development, SWOT analysis for key challenges, environmental remedies and ecological economic potential; supported with media coverage and reporting. (Gender inclusion for attendees).

1.3 Conduct biodiversity inventory for Al-Makhrour valley; including comprehensive surveys for Al-Makhrour Valley ecosystem, identification of habitats, including flora and fauna species, birds (winter/summer migration), values of biodiversity, conservation targets and their threats using RSCN methodology for fauna surveys<sup>1</sup> and Braun and Blanquet for flora surveys<sup>2</sup>, IUCN guidelines<sup>3</sup> and GIS/RS analysis). This includes five field trips/surveys per targeted locality and the whole valley at the different year seasons (total 20 field trips).

1.4 Prepare baseline evaluation report for ecosystem/biodiversity status at Al-Makhrour Valley (conducted during Spring year 2019)

1.5 Establish ecology, flora, fauna and birds databases; information will be gathered from literature review, stakeholders meetings, and field surveys.

1.5.1 Ecology section with set of indicators such as: studying areas, borders, physical characteristics, type /area of vegetation cover, type/area ecosystem type and number/type of habitats, and other cultural/ natural features/resources and heritage items of the targeted area, and others. Using GIS and RS applications.

1.5.2 Flora and fauna section will be based on measuring taxonomic diversity of a targeted geographic area; looking at species richness, abundance and frequency, etc. at this area, conservation values of targeted habitats using Braun and Blanquet method for flora, IUCN red listing, species global / national conservation status, utilization/economic values, endemism and others<sup>4</sup>.

1.6 Establish monitoring database including monitoring indicators divided into sections related to the natural feature investigated such as ecology, habitat, flora, fauna,

<sup>1</sup> RSCN. 2005. The Royal Society for the Conservation of Nature: Field Research Manual.

<sup>2</sup> <https://link.springer.com/article/10.1007/BF01866672>

<sup>3</sup> Example: <https://www.iucn.org/content/how-incorporate-gender-conservation>

<sup>4</sup> <file:///C:/Users/User/Downloads/9783319154633-c2.pdf> and

and birds. Examples on indicators are: total degraded area of total targeted area (using GIS&RS applications), changes in degradation, changes in habitats and NDVI over 10-15 years, habitat/species richness from baseline to end line surveys and others

- 1.7 Prepare biodiversity management plan for the Valley, considering both the landscape, socio-ecological systems, and climate change aspects to be handed to relevant decision makers and stakeholders supported with CMP model (CMP, 2013)<sup>5</sup> and interviews with stakeholders and gender inclusion.
- 1.8 Identify key sensitive habitats along the valley and set their conservation frameworks and restoration schemes for selected habitats; supported with field visits, reporting and monitoring data base (section 1.6) (referring to IUCN, 2012)<sup>6</sup>; building on the findings of previous sections 1.3, 1.5, and 1.7 and others<sup>7</sup>).
- 1.9 Hand the management plan, conservation frameworks and restoration schemes documents to EQA and MoA.
- 1.10 Formulation of one committee for restoration actions from key stakeholders from local communities, EQA and MoA directorates in Bethlehem Governorate, and others (40% females).
- 1.11 Restore up to max. 3 dunums of key habitats where found necessary, the method for restoration will be decided based on the type of pressures and threats affecting the sites.
- 1.12 Prepare end line evaluation report for updating ecology/biodiversity status at Al-Makhrour valley conducted in Spring 2020
- 1.13 Publish 3-5 scientific publications of relevant to this project output
- 1.14 Follow up report at end of the project (year 3); to measure impact of the project on reduction of damaging activities (hunting, logging, dumping waste, fires, etc.) where number of M&E questions are embedded. It will include sum the findings of other conducted follow up surveys during the project period such as the ones mentioned in 1.4, 1.6, 1.7, 1.8, and 1.12.

**Output 2: Economic benefits to the local communities; including women and youth, in proximity to Al-Makhrour Valley are secured through sustainable agriculture and eco-tourism enhancement**

- 2.1 Formulation of one committee for traditional farming program from key stakeholders from local communities, MoA directorate in Bethlehem Governorate, and others (40% females)
- 2.2 Prepare and distribute announcement invitation to local farmers to apply for the selection process for the project agriculture intervention, invitations are distributed at key organization, shop, and religious sites
- 2.3 Revise the applications filed by farmers from targeted villages/towns with the formulated committee based on set of criteria for the selection process; supported with inspection field visits for a sample of selected farmers (50% of targeted farmers)
- 2.4 Sign MoUs with the selected 80 farmers to specify the roles and responsibilities of both parties; emphasizing the obligation to sustain the inputs after the project ends
- 2.5 Purchase agricultural inputs for 40 dunums for both agricultural summer/winter seasons 2019 and summer/winter seasons 2020 including
  - 2.5.1 Irrigation network: main pipes (1200 meters of 16 ml pipes/dunum) and secondary pipes (200 meters of 25 and 32 ml pipes/dunum)
  - 2.5.2 Up to 1 water tank (1 cubic meter and 1 pump (1 horse power) for each farmer beneficiary.
  - 2.5.3 Up to 1100 seedlings and /or 6 kgs of seeds of vegetables per dunums per season (summer vegetables will be Battiri eggplants, hot & sweet pepper, cowpeas, beans, squash, cucumber, tomatoes, okra and others. Winter vegetables will be cauliflower, cabbage, lettuce, spinach, raddish, broad beans,

<sup>5</sup> CMP, 2013. Open Standards for the Practice of Conservation of the Conservation Measures Partnership (<http://cmp-openstandards.org/wp-content/uploads/2014/03/CMP-OS-V3-0-Final.pdf> )

<sup>6</sup> IUCN, 2012. Ecological Restoration of Protected Areas: Principles, Guidelines and Practices (<https://portals.iucn.org/library/sites/library/files/documents/PAG-018.pdf> )

<sup>7</sup> Folke, C., R. Biggs, A. V. Norström, B. Reyers, and J. Rockström. 2016. Social-ecological resilience and biosphere-based sustainability science. Ecology and Society 21(3):41. <http://dx.doi.org/10.5751/ES-08748-210341>

onions, thyme and others)

2.5.4 Up to 25-30 sacks of organic compost per dunum per season

- 2.6 Land preparations, weed removal and organic compost additions for selected land-farms (0.5 dunum for each selected farmer)
- 2.7 Distribution of agricultural inputs and cultivation of diverse summer and winter vegetable crops at selected farms under optimum sustainable conditions
- 2.8 Conduct 4 follow up field visits per farmer per season (320 visit/ season), supported with reports
- 2.9 Conduct two cross village exchange and demonstration visits (during first three cultivation seasons). After having a successful plantation season an exchange visit will be arranged per season to demonstrate sites, and to foster collaboration and cooperation between participating villages/farmers and extension to villages outside the scope of this project.
- 2.10 Evaluation report for summer /winter vegetables production (expected to produce 1500-2000 kg/dunum) and income generation / food self-sufficiency of this activity on yearly basis
- 2.11 Conduct first /second festival during harvesting period of summer cultivation season in Battir village and of winter cultivation in Beit Jala upon consultation with formulated committee and the 40 selected farmers (50% women) for each festival. This includes renting an accessible open place in Battir/ Beit Jala, setting tables with simple tents, all necessary coordination and announcements and media coverage, etc. Priority will be given to project targeted farmers.
- 2.12 Prepare the follow up report for the success and lessons learnt from the festival events after one month from ending the festivals
- 2.13 Conduct a 2 day workshop for cooperatives partnerships, introduction to Fair Trade Networks (Palestinian and Arab) and business enhancement and prepare workshop minutes of meeting including list of attendees and their contacts, photos and recommendations
- 2.14 Prepare the follow up report for marketing progress of the selected cooperatives on yearly basis (years 2019 & 2020), based on evaluation survey for the cooperatives
- 2.15 Formulation of one committee for eco-tourism program from key stakeholders from local communities, MoTA directorate in Bethlehem Governorate, and others (40% females)
- 2.16 Study the Valley's path and identify the best places to mark the visitors' path; supported with specification for the marks and consultation of the relevant formulated committee
- 2.17 Conduct cleaning works and install 20 arrow signs, 20 plant-info signs and 2 maps with some volunteer works along the Valley's visitors' path
- 2.18 Prepare follow up report for the level of enhancement in tourism sector in targeted area
- 2.19 Provide four sub-grants (for 4000 (£) each) for four existing/initiated women business enterprises for marketing local products at four targeted localities based on consultation with eco-tourism committee, selection process, market selling business plans and after signing agreements with the initiatives. The project will support them with ideas and provide them with the required entrepreneurial and business coaching that enables them to develop their ideas into successful businesses
- 2.20 Prepare follow up and evaluation report for the progress of the initiated SMEs on yearly basis
- 2.21 Follow up report at end of the year; to measure impact of the project including generation of income, including outcomes of the other follow up surveys and evaluation reports (2.9, 2.12, 2.14, 2.18, and 2.20)

**Output 3: Raise awareness of and build capacities of local communities and stakeholders to better manage their natural resources, support conservation measures and benefit from sustainable agricultural and eco-tourism interventions while impacting the national legislation and involving both females and youth**

- 1.1 Conduct one-day workshop for key stakeholders to present the Valley's biodiversity management plans to be considered at legislative level. Gender inclusion.
- 1.2 Conduct four one-day workshop to enhance marketing networks, initiation of small business enterprises, and methods of governance, and protecting traditional

knowledge for farmers and relevant cooperatives supported with educational material and gender inclusion

- 1.3 Conduct two-days workshop for alternative tourism operators and of the local targeted communities that works in the tourism sector; supported with educational material and gender inclusion.
- 1.4 Conduct four two-days training sessions for best sustainable farming practices, permaculture, organic farming and biological control for benefited farmers; supported with educational material, training evaluation, and gender inclusion
- 1.5 Conduct four two-days training sessions for best practices in conserving biodiversity and maintaining the eco-system services; supported with educational material, training evaluation, and gender inclusion
- 1.6 Conduct one-day training session for women entrepreneurs who has initiated their business selling points; supported with a business plan for each initiative, educational material, and training evaluation
- 1.7 Conduct two two-days food processing training sessions for women headed households; supported with educational material, and training evaluation.
- 1.8 Ten meetings for 5 schools located in Bethlehem District to present the project, the valley, raise environmental awareness, and create school environment clubs; supported with educational materials/modular, cooperation of MEHE, and gender inclusion
- 1.9 Finalized 10 modular that are based on project studies and in different project fields
- 1.10 Follow up report for the school environmental clubs at the selected schools
- 1.11 Disseminate up to 106 social media announcements, 15 newspaper news
- 1.12 Conduct 4 TV sessions to discuss on air the different subjects the project is dealing with and supporting. Specialists and decision makers will be invited.
- 1.13 Prepare a webpage for the project under the PIBS- BU website to present all project accomplishments, follow up reports, educational material, scientific research and publications
- 1.14 Prepare and Print brochure for the project area; includes a description, management plans, key area for conservation and restoration, touristic plan and potential business opportunities, guiding tour with a map (locating the visitors path, villages in proximity, selling points, etc.), guiding orientations for tourists with recommendations for best practices at the sites, etc.
- 1.15 Conduct follow up surveys for sample of local households (20%of total beneficiaries (of which 50% females); to measure impact of the project including environmentally sensitive practice
- 1.16 Progress reports every six month summarize the project achievements, on-going activities, success stories and evaluations; all supported with relevant verification means.
- 1.17 Final technical and financial audit reports. The technical part will describe the accomplishments of the projects, impacts (based on project follow up reports and surveys), facts and main findings, sustainable outputs, opportunities for development and building on, etc.

## Annex 3: Standard Measures

**Table 1 Project Standard Output Measures**

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
2	Master students' participation	4 Female 2 Male	Palestine	3	3		6	Not planned
4 A	Undergraduate research	4F, 3 M	Palestine	5	2		7	Not planned
5	Hired staff training	1 F, 1 M	Palestine	2	2		4	2
6A	Farmers	23 F, 60 M	Palestine	67	83		83	80
7	Training material (power points etc.	NA	NA	4	2		6	10
9	Management plan for valley	NA	NA	1	1		1	1
10	Field guides/manuals	NA	NA	1	1		1	3
11 A	Number of papers to be published in peer reviewed journals	NA	NA	0	5		5	8
11 B	Number of papers to be submitted to peer reviewed journals			3	3		6	
12 A	Number of computer based databases to be established and handed over to the host country	NA	NA	1	2		3	3
13 A	Number of species reference collections to be <b>established</b> and handed over to the host country(ies)	NA	NA	0	4		4 (mammals, plants, birds, fossils)	8
14A	Number of conferences/seminars/ workshops to be <b>organised</b> to present/disseminate findings	NA	NA		1		1	3
14B	Number of conferences/seminars/ workshops <b>attended</b> at which findings from Darwin project work will be presented/ disseminated.			0	1		1	

23	Value of resources raised from other sources (i.e., in addition to Darwin funding) for project work	NA	NA				
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**Table 2 Publications**

<b>Title</b>	<b>Type</b> (e.g. journals, manual, CDs)	<b>Detail</b> (authors, year)	<b>Gender of Lead Author</b>	<b>Nationality of Lead Author</b>	<b>Publishers</b> (name, city)	<b>Available from</b> (e.g. weblink or publisher if not available online)
Macrofungi from the Hebron and Jerusalem Hills of Palestine	Journal	Maximus Theresa Thaler, Aysha Al-Wahsh, Alea Meuser, Alyssa Rooks, Mazin Qumsiyeh (2020)	Male	American	Mycotaxon (Ithaca, New York, USA)	<a href="https://bit.ly/2SZ41Hd">https://bit.ly/2SZ41Hd</a>
First Record of the Western Conifer Seed Bug, <i>Leptoglossus occidentalis</i> Heidemann, 1910 (Hemiptera, Coreidae), from Palestine	Journal	Elias Handal and Mazin Qumsiyeh (2019)	Male	Palestinian	Jordan Journal of Biological Sciences (Zarqa, Jordan)	<a href="https://bit.ly/3bww6wg">https://bit.ly/3bww6wg</a>
Assessing long-term changes in the raptor fauna of the Fertile Crescent by reference to the nineteenth century works of Canon HB Tristram	Journal	Reena Saeed and Mazin Qumsiyeh (2020)	Female	Palestinian	Ornithological Society of the Middle East (Bedfordshire, UK)	<a href="https://bit.ly/2YU0Bt4">https://bit.ly/2YU0Bt4</a>
Protection of endangered ecosystems via museum research and education	Journal	Mazin Qumsiyeh and Zuhair Amr (2020)	Male	Palestinian	Sharjah Museums Authority (Sharjah, UAE)	<a href="https://bit.ly/2Lz304R">https://bit.ly/2Lz304R</a>



Status and Conservation of the Striped Hyena (Hyena hyena) in the occupied Palestinian Territories (West Bank)	Journal	E. Handal, G.H. Qumsiyeh, S.Y. Hammash, MB Qumsiyeh	Male	Palestinian	Jordan Journal of Natural History	In press
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## Checklist for submission

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	Yes
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.	No
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	