



Technical Report

IUCN Netherlands Land Acquisition Fund

Project number: 601042

JUNE, 2018

Creation of a Protected Area in Qara Dagh, Kurdistan Region Iraq, to secure habitat of Persian Leopard

This ambitious joint project was launched between IUCN NL / SPN and Nature Iraq (NI), in cooperation with the Kurdistan Environmental Protection and Improvement Board (KEPIB) and generously funded by the Dutch National Postcode Lottery, to create a protected area to protect and preserve the internationally endangered Persian leopard and the rich ecological, cultural and historical value of the Qara Dagh, a Key Biodiversity Area previously designated by NI and a hotspot for many endemic plants and animals. The project envisaged a fruitful partnership with the Kurdistan Regional Government (KRG) to officially recognize an area of more than 2200 hectares of Qara Dagh Mountain ridge (Qopy Qara Dagh) on a regional level and to plan the next steps of its national and international recognition. During this one year project, the team held more than 20 meetings with local government representatives to obtain the official documents needed to commit the land for this purpose. All appropriate permits were obtained for the land to be allocated with NI as the leading agency in the management of the land for the purpose of nature conservation. The goal of this project phase was to secure and systematically manage this land, establish a management plan, involve key stakeholders and promote ecotourism. The outcome of the project was the establishment of a new forest police checkpoint (ranger station) by allocating six officers in the heart of the proposed land to prevent hunting and logging, and the establishment and furnishing of a sustainable Eco lodge that will be operated both as an educational center and as a bed and breakfast facility for nature enthusiasts, campers and hikers.



Visit Nature Iraq website
www.natureiraq.org

Summary of results

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Project implementation

Activities carried out with the support of SPN/ IUCN NL;

1. Meeting with the KRG Deputy Prime Minister, discussing the project and obtaining their full support of the project.
2. Several meetings between NI and KEPIB were conducted via PowerPoint presentations on the project goals and plans, and discussions on how to move forward with the signing of the draft MoU.
3. Many meetings were held with Jalal Karim, the KRG deputy interior minister, who has played a vital role in supporting the project since the project's inception.
4. Many meetings were held with Dliwa Abdulla, director of Qara Dagħ municipality, who was one of the main facilitators and supporters of the project who provided all the vehicles needed during the construction of the eco lodge and ranger station.
5. Several meetings with the Sulaimani General Directorate of Agriculture about the land ownership and the required maps of the land were obtained from them.
6. Meeting with Rauf Kamal, Qara Dagħ Qaimaqam (Mayor), their support for the project and how to promote implementation of the project.
7. Building the Ecolodge in the protected area which took five months to build and furnish.
8. The ranger station was established, furnished, and officially handed over to the officers through Sulaimani's Forestry Police General Directorate.
9. About 100 trees (Oak and Hawthorn) were planted in the Ecolodge and around it.
10. A 24 amp solar system has been installed to supply power to both the Ecolodge and the ranger station.
11. Surveillance cameras owned by NI were installed at the Ecolodge and the ranger station for security purposes.

12. Many local and international media outlets, such as the biographical magazine and DW TV, have highlighted the project and its activities.
13. Three presentations were given to Environmental Engineering students at Komar University for Science and Technology to advocate and raise awareness of biodiversity and the value of the Qara Dagh Protected Area project.

Project Outputs

1. A detailed justification report has been developed for the proposed protected area to be used in lobbying for the national recognition of the site by the Iraqi Ministry of Health and Environment (IMoHE).
2. A rough draft of the management plan has been developed, which require more in-depth gap analysis and additional information to be collected on the geology, hydrology, and a detailed survey of the area's fauna.
3. A list of the Protected Area Management Board (PAMB) and stakeholders that will be the main point of contact for aspects related to the management of the area.
4. Official written letters from the following related ministries and directories of the KRG in their support of the project: Prime Minister of KRG, Ministry of Finance and Economy, Ministry of Agriculture and Water Resources, Ministry of Interior, and Ministry of Municipalities and Tourism.
5. A MoU between NI and KEPIB which outlines both partners' responsibilities and commitment to the management of the protected area as well as their collaboration on other biological conservation projects.
6. A sustainably designed and furnished Ecolodge with 3-bedrooms/8-beds, meeting and entertainment space and a full capacity kitchen, with a large outdoor space.
7. A newly built and equipped ranger station in the heart of the protected area to prohibit hunting and logging in the area
8. NI created a comprehensive ecotourism program for KRG, which wasn't implemented due to the country's economic recession. This plan will be updated to be implemented in Qara Dagh.
9. In addition, a socio-economic survey was conducted for the region with co-funding from the Goldman Environmental Foundation, and a written report is produced on the different socio-economic aspects of the area to inform stakeholders.

Activities still to be completed

1. The PAMB meetings are pending due to delay in the mandatory paperwork. Scheduled for March-May.
2. Installing the protected area sign board with the project partners' logos.
3. English translation of the official documents and Arabic translation of the MoU

Problems encountered in project implementation

One of the challenges to achieving some of the project activities on time emerged from an official letter from the KRG Prime Minister requesting the signing of a (MoU) between NI and KEPIB seeking further official permission from the ministries concerned to appoint a representative to be on the board of the PAMB.

Steps taken to address these problems

Before implementation of the project, NI started paperwork in anticipation of the long process. NI also used personal connections to facilitate the paperwork that helped to increase the pace of the process. Additionally, frequent contact and follow-up with the KEPIB head has also helped speed up the process. In addition, NI's long history as a reputable conservation organization led to a direct meeting of the project manager with the KRG's Deputy Prime Minister, Mr. Qubad Talabani, who pledged full support to the project that strengthened support from all related ministries.

Assessment of results of the project

Extent to which the project goals and objectives were achieved or not. Please also specify the impact of the purchase on local stakeholders as identified in the project proposal (item 5G)

The results of the project met expectations with the amount of local and international support it got but also the results of the project show that the project has made great strides with extremely limited staff and resources. The formation of the PAMB was, however, delayed due to the delay in signing the MoU, which required prior approval by other ministries. This activity is planned for April 2020, with the approval of the final allocation of funding from IUCN NL. In addition, the ecotourism program for the Qara Dagh Protected Area will be incorporated into NI's wider vision of developing an ecotourism plan in the Kurdistan region. In a later stage, NI will sign a cooperation

agreement with the Ministry Municipalities and Tourism to implement parts of this plan at the Qara Dagh protected area.

The main strengths of the project

The project's main strength has been the ongoing local and international support for the project. Local authorities endorsed the project and completed the official paperwork needed for the land acquisition. This area will become the KRG's first officially recognized protected area to meet national and international standards. Focusing on the Persian leopard as a flagship species to lobby for the area's importance was also another strength point which encouraged the government to recognize the area as a priority site for conservation.

The main weaknesses of the project

Implementing a project as such takes time and commitment. The project's short time period and the complicated bureaucratic system that disrupted some of the project's operations were the principal shortcomings.

Lessons learned

The lessons learned during this project's execution were very unique and a new experience for the NI team. The paperwork on land acquisition, the various



government bodies applicable to this form of land acquisition and the KRG's very positive support and guidance have all been a very eye opening experience

1.Management

The broad scope of the management plan was to provide the Qara Dagh area with a tangible plan for the protection of the Persian Leopard *Panthera pardus saxicolor* and the biodiversity of the area, while ensuring a sustainable development of the territory and increasing the value of its unique features, so that they can be enjoyed by present and future generations.

The composite, extraordinary circumstances that affected and still affect the region, both from an environmental and from a socio-economic point of view, determined the necessity to adopt a planning approach that differs from the scheme usually applied to similar projects of National Parks in Iraq. Instead of a top-down approach, we are combining cooperation from the local governments and a stakeholder involvement approach for the express purpose of making sure that the locals will act in their own self interest in protecting the area. In order to face the uncertain and unpredictable situation of the context in which the project has to be carried out, stakeholders' involvement, flexibility of the planning process and effectiveness of actions to be implemented are fundamental basic concepts that will guide the prioritization of the choices made by the project partners.

The stakeholders' involvement will be achieved at every stage of the study, with the active participation of the local communities, and of experts of the KEPIB, the IMoHE, KRG MoAWR, MoMT and MoI. Each Ministry nominate one expert as "focal point" for the PAMB with the responsibility of taking part to every meeting contributing to the whole planning process.

The flexibility of the planning process is to be ensured through a continuous feedback between previous decisions and the assessment of the new gathered data, to ensure the link of the project with the real situation in the field. A constant assessment is to be performed between the status of the area with continuous monitoring. This allows the group to overcome the difficulty of gathering information in the field, due to the unstable circumstances of the region, and to proceed with the planning process.

The three-year program has been developed through three phases that coincide with the drawing up of three main documents: the Feasibility Study for the Qara Dagh Protected Area; the consequent draft version of the Management Plan; and the execution of an Operational Program that will anticipate and support the writing of the final version of the Protected Area's Management plan.

The Scenarios' tool

A great number of natural, cultural and socio-economic resources, of national and international significance, characterizes the identified Qara Dagh (Qopy) area and its surroundings. The constraints that affect the site are also many and of different kinds. Therefore, in order to better exemplify the possible development of the park study area, three scenarios were drawn up as final recommendation of the Feasibility Study.

The characteristics of the selected park area, with its features and objectives for nature protection and restoration, represent the basic platform on which every scenario is built. The baseline environmental assessment of the study area conducted by NI over the past 12 years defined a good picture of the status of Qara Dagh that provided the framework for the delimitation of the park's boundaries.

Three main criteria used for the delineation of the protected area

1. Based on the territorial features of the study area, namely:
 - accessibility to the area
 - the key species (Persian leopard) habitat and its prey
2. based on the socio-economic situation of the study area, namely:
 - location of towns and villages and current trend of urban development
 - paths of main transport infrastructure (roads, waterways)
 - location of strategic areas of different economic sectors (oilfields, areas of planned agriculture, private lands and orchards)
3. based on a strategic view of the corridor and connectivity of the entire ecosystem:
 - the link between the mountain ridges (the Qopy) is maintained, and a possible future connection with other ecosystems which may be used by leopards might be considered. The final delineation of the park's area is the result of a process that combined the analysis of all these features. As noted earlier, we now have the opportunity, based on demand by local leaders, to expand the protected area delineated to encompass the entire Key



Biodiversity Area of Qara Dagh. We will consult with other stakeholders, including governmental agencies to evaluate the potential for enlarging the protected area that we are working on as part of the management plan development.

The three scenarios bring to the foreground the different characterizations that the park can assume, suggested by the fruition of the area resources, and highlight their related effects on the surroundings: they cover the Scientific, Cultural and Educational Assets, the Economic Assets and the Tourism Assets.

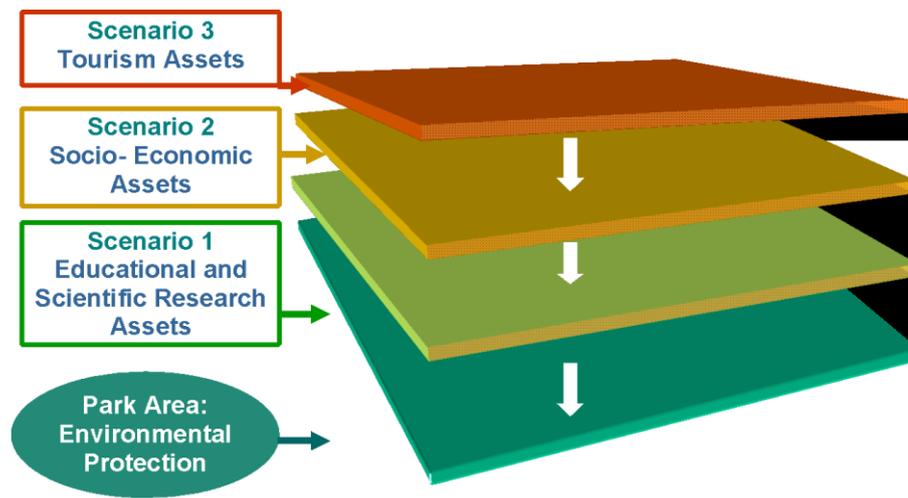


Figure 1: The three scenarios overlapped on the environmental basis

Each scenario has been described through the definition of the vision, the explanation of the main objectives, the key activities to develop and the privileged users that the scenario is geared toward. Through the generous opportunity offered by IUCN NL/LAF, NI built an Ecolodge in the protected area as a first step to incentivize ecotourism activities.

NI will be using the Ecolodge to initiate general knowledge about the environment, conservation and the importance of the protected area and its components, with particular attention focused on the wildlife value, history and local traditions, by conducting study tours and overnight stays and creating educational material featuring the participation of the academic scientists and conservationists.

The aim is to develop interdisciplinary research and collaborations with corporate bodies and international institutes and organizations based on unique environmental,

historical and cultural characteristics of the protected area. Parallel activity is the organization of seminars and training courses to develop a new educational package pertaining to sustainable land use, agriculture, rural development, threats and mitigation, ecosystem health and management for teachers, students and people working in government offices.

The Socioeconomic scenario considers that the correct management of the protected area can result in significant incomes and consequent well-being for the local communities and surrounding villages. The protected area can be seen as a pilot project to demonstrate the possibility to achieve results with sustainable activities, according with local communities. The right way to set-up such structure is by ensuring that the benefits for agriculture, rural farms, urban enterprises and businesses in general and IUCN guidelines for business development (oil field development in particular) and ways of life are included, and implemented in the development of the protected area.

As far as economy concerns, some key activities can be considered good incentives for implementing a system able to meet with both the environmental protection and the economical sustainability: livestock feeding, plant harvesting, and agriculture can be the main business activities. The key concept for the third scenario, focused on tourism, is the vision of the Qara Dagh as an environmental and cultural asset. Hence, the main objectives are to provide opportunities for ecotourism linked to bird watching, leisure time and education. The spread of a healthy living for local communities will constitute the basic feature able to attract an increasing number of visitors to the area. One of the main concepts, achievable in a long-term vision, could be through linking the park area with the tours organized to visit the archaeological sites and historic cities that are present in the neighboring areas, providing outstanding attractions and facilities suitable to attract international tourism.

Each Scenario highlights the site's significant resources and opportunities, suggesting a range of alternative developments according to the Park Area environmental objectives. By isolating each asset, the process of defining the alternatives and evaluating the planning choices is simplified and easy to explain to all the stakeholders involved. The comparison between the current situation and the scenarios' proposals will allow the decision makers to list the priority, to evaluate the choices and to indicate to the planners how to proceed with the implementation of the management plan on the ground. In this manner, the various proposals of activities to

be carried out in the region has the possibility to be aggregated in a coordinated and well-structured “Operational Program” instead of being developed separately.

The now completed initial part of this project aimed to compile and analyze new data on the status and geographic range of the Persian leopard and its prey in Qara Dagh, set the basis for further conservation and environmental protection efforts.

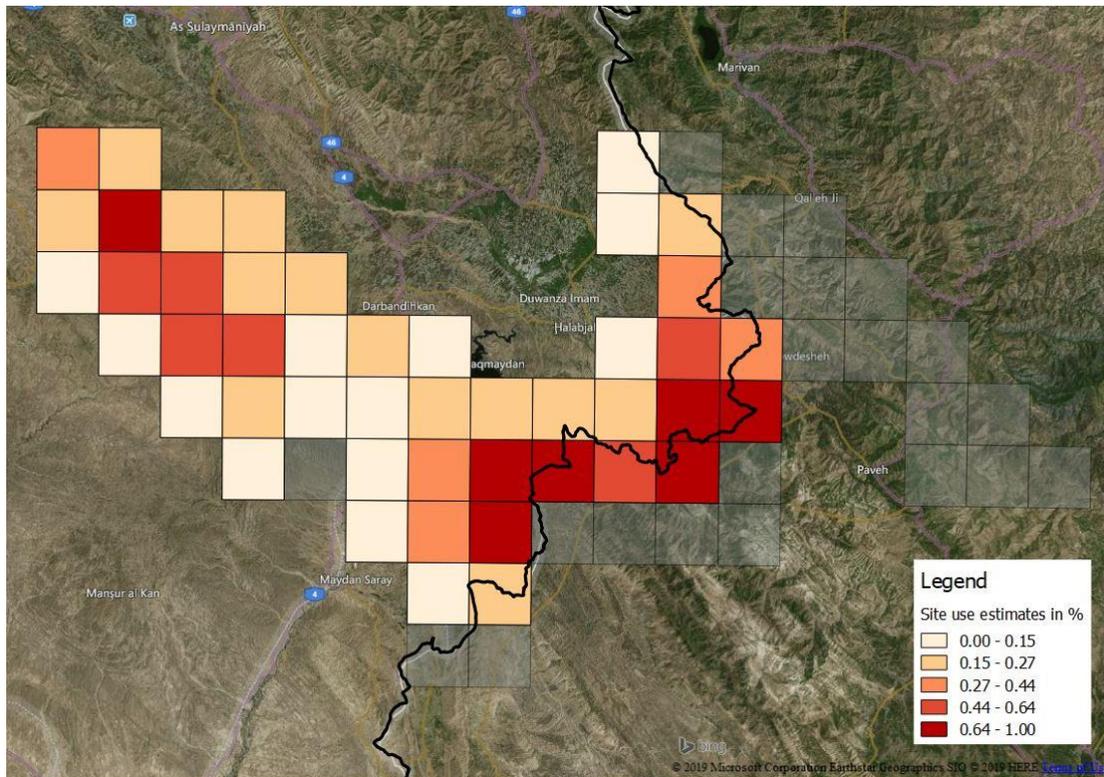
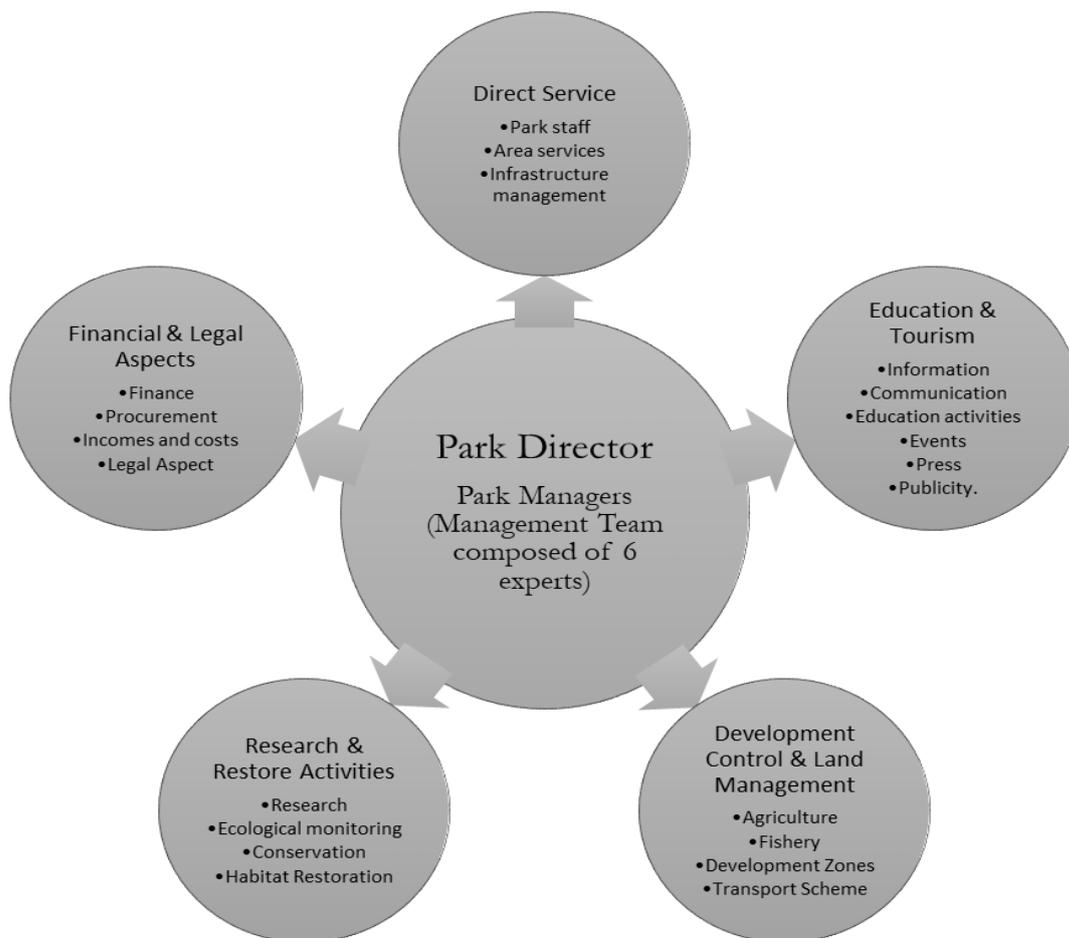


Figure 2: The occupancy modeling showing the use of Habitat by the Persian Leopard in Qara Dagh, Darbandikhan, and Hawraman (Map By Anna Boerman, 2019) (Unpublished data)

The Feasibility Study was developed as the preliminary document to assess the real possibility of creating a protected area in Qara Dagh. The related other objectives were to identify the type of protected area to be established and the location of the study area with a draft identification of the boundaries. The PAMB will be perpetually in charge of updating and revising the management plan as budgets become available and as new conditions are discovered that may affect the protected area. One of the most uncertain potential development will be the presence of oil reservoirs in the area and how the development of such would affect the area be it through competition for

water, increase traffic and general problems associated with such kind of development. Given the sensitivity of this issue, NI has adopted a forward leaning posture and chose to engage the international oil companies working in the area and advise them on how to achieve their goals in an environmentally sensitive manner while lobbying for lowering their impact on the area’s biodiversity as well as financing some of the recreational projects planned for the area.

Management Committee composed of local representatives of relevant ministries, local authorities, scientific experts from local universities and key stakeholders.



Next steps

The second phase that we are embarking on at this stage is the preparation of a draft management plan and, secondly, by preliminary studies to identify which are the most suitable pilot projects to be included in the operational program. It is important to re-emphasize here that we are adopting a process new to this area through the engagement of the local stakeholders, taking into consideration their concerns, and having

them as our advocates in the creation of the management plan and most importantly in



the implementation and adaptation of the plan. Some of the projects that we are going to suggest in our coming meetings are as follows:

- Rangers Capacity building and this will be done through
 - a- Training, setting regulations.
 - b- Providing equipment and transportation facilities such as motorcycles, horses, and mules.
- Reforestation (mainly oak trees):
 - a- Roots and shoots nursery
 - b- Coppicing and trimming

- c- Fire control
- d- Water harvesting
- Trails and Treks:
 - a- Bezoar goat track trail
 - b- Cycling trail
 - c- Camping sites
 - d- Trekking/backpacking
 - e- Bird watching
 - f- Eco-lodge extension
- Veterinary and domesticated animal herding
 - a- Considering the creation of special areas (sheds, watering holes, etc.) in the buffer zones for provision of ranges for the local cattle, goat, and sheep herders to feed their stock instead of roaming the valleys of the protected areas.
 - b- Veterinary clinics for immunization against disease such as PPR and foot and mouth disease.
 - c- Control of feral dogs to prevent disease spread to the wild animals
- Advocacy & education (field guides):
 - a- Providing environmental tools to educate and recruit elementary school students
 - b- Field guide of the mammals of Qara Dagh
 - c- Field guide of the reptiles and amphibians of Qara Dagh
- Research and monitoring:
 - a- Bezoar goat population estimation. This is the topic of the project manager's MSc. research project at the University of Newcastle.
 - b- An archaeological sites research is proposed, to identify the location, current status and potential value of the archaeological resources within and around the Qara Dagh protected area. There is ongoing excavation activities that could represent a very important point of interest for national and international researchers but also for a future tourism development of the sites.

Eco-tourism can be an important income-generating activity in Qara Dagh area, but is not always conducted in an efficient, sustainable, or environmentally friendly manner. Therefore, locals can use the already started pilot project for aquaculture by NI, through building ponds and harvesting water from the rain and springs in the area as

an income source, when people visit the area to buy fish from the locals as they visit the park area for picnicking.

Annexes

Annex 1: Plates showing the project team activities during the project period



Meetings with the KEPIB staff



Stakeholder meetings



Government meetings



The sustainably built Ecolodge at the Qara Dagh PA



The rangers station at the heart of the PA



Surveillance cameras owned by NI installed at the lodge and the ranger station



Solar system installed on the roof of the Ecolodge