

Hashemite Kingdom of Jordan
Badia Ecosystem and Livelihoods Project (BELP)
October 2011

BACKGROUND

The Jordan Badia Ecosystem and Livelihoods Project is one of four projects under the regional MENA Desert Ecosystems and Livelihoods Program (MENA-DELP), currently under development as a GEF and World Bank partnership. The goal of the program is to capture and harness the value of desert ecosystems in order to optimize the flow of goods and services for environmentally and socially sound development of deserts. GEF financing leveraged through the MENA-DELP will enable countries in the region who have already expressed their interest to operationalize their existing or planned investments in desert ecosystems. A final Program Framework Document (PFD) was submitted to the GEF on October 17, 2011, identifying country projects in Algeria, Jordan, Egypt and Morocco, all focusing on investments to optimize the provision of desert goods and services for enhanced livelihoods. The focus of these projects will be on different production sectors, from eco-tourism to agriculture to livestock management, and on improving the sustainability of these investments through an integrated ecosystem management approach. Emphasis will also be placed on participatory approaches, capacity building and on harnessing valuable local knowledge. This initial group of countries will also serve as an example in terms of promoting the MENA-DELP framework as incentive for other countries in the region with no existing or planned investments in the desert biome to develop these as a national priority in subsequent phases.

Project Development Objective and Indicators

The proposed Project Development Objective (PDO) is to *sustain livelihoods by enhancing ecosystem services in three poverty pockets of the Jordan Badia*. The PDO will be measured against the following proposed PDO-Level Indicators:

- Number of new sustainable eco-tourism related jobs along the Al Azraq/Shaumari-Burqu' corridor
- Acreage of rangelands managed by communities in a sustainable manner in Al Jafr and Al Husseinieh
- Number of men and women benefitting from project capacity building in Ar Ruwaished, Al Jafr and Al Husseinieh poverty pockets

Project Description

GEF amount: \$3.33 million

Focal Areas: Land Degradation and Biodiversity (as Jordan has a flexible star allocation, funds are also drawn from the climate change focal area).

The project will be composed of **three components**, focusing on three poverty pockets in the Jordan Badia, namely Ar Ruwaished (Northern Badia), and Al Jafr and Al Husseinieh (Southern Badia) during the years 2012-2016. **Under component 1 (Ar Ruwaished poverty pocket)**, the project will expand eco-tourism into the northeast Badia by using the (Royal

Society for the Conservation of Nature) RSCN-managed Al Azraq and Shaumari reserves and attached facilities as a starting point, from which a 250 km eco-tourism corridor will be developed. The corridor will be developed around a concept of “*low volume, high value*” community-centered eco-tourism. Under **component 2 (Al Husseinieh and Al Jafr poverty pockets)**, the project will support the development of a more sustainable natural resource base for local communities through the establishment of water harvesting mechanisms, establishment and management of two rangeland reserves managed by the communities, and capacity building for livelihood support and maintenance. Under **component 3**, an effective Project Management Unit (PMU), capable of directing and supporting project implementation will be established in the National Center for Agriculture Research and Extension (NCARE – the project Implementing Agency).

PROJECT TIMELINE

Milestone	Timeline
Quality Enhancement Review	January 2012
Decision Meeting	February 2012
Appraisal	February 2012
Negotiation	April 2012
Bank Board approval	June 2012
Effectiveness and launch	August 2012

Project Description

Component 1: Community-Centered Eco-Tourism in the Northern Badia (Total GEF (without contingencies): US\$1,325,000, Co-financing (without contingencies): US\$191,000)

Eco-tourism in Jordan is considered one of the main pillars of the tourism sector due to the Kingdom's diverse natural landscapes and sceneries, which constitute unique tourist destinations. Around 975,000 tourists visited the Petra National Park in 2010, while 500,000 visited the country's nature reserves last year. The GEF, USAID and other donors have partnered with RSCN to implement a community-based approach to achieve protected area management and poverty reduction in eco-tourism projects in Jordan. Tourism services and natural product-based craft enterprises have been established in the Dana Biosphere Reserve in south Jordan, the Al-Azraq Reserve in the Eastern Badia, and the Mujib Reserve near the Dead Sea and Wadi Rum. More than 3,000 residents are receiving direct or indirect benefits as a result. RSCN's people-centered approach to protected area management was first piloted in 1994 in the Dana Biosphere Reserve, through the establishment of a range of tourism facilities, including a campsite, guesthouse and eco-lodge. Inspired by the success of the initiative, RSCN has been replicating the Dana model in all its protected areas, including the Mujib, Azraq and Ajloun nature reserves, providing a series of outdoor activities, such as hiking, biking and abseiling to engage visitors during their stay.

Burqu' has been proposed as a Protected Area (PA) following studies carried since 1978. Reasons behind proposing Burqu' were to conserve the *Hamada*¹ and *Harra*² and land types and their associated fauna and flora elements. The potential of Burqu' as an eco-tourism destination has been emphasized due to its geological uniqueness (*Harra*, *runoff Hamada* and *Marrab*³ land types), scenic value (an aquatic habitat alongside diversified ecosystems), flora and fauna diversity (94 species belonging to 25 families) and archeological attractions (the main one being Qasr Burqu' – a Bizantyne period fort). Considerable research and background work has been carried out for the Burqu' area as part of the BRP baseline phase. As a result, detailed information is available on: socio-economic conditions of the villages located near and around the Burqu Protected Area, namely Ar-Ruweished, Salhiet Al-Noeem and Manshiet A –Ghaiath; the knowledge and attitudes of the Burqu' population towards a Burqu' PA gathered from a rapid rural appraisal; flora and fauna basis, including a detailed bird survey; rangeland status; and soil surface.

Under component 1 the project proposes to expand eco-tourism into the northeast Badia by using the RSCN-managed Al Azraq and Shaumari reserves and attached facilities as a starting point, from which a 250 km eco-tourism corridor will be developed reaching the Burqu' Reserve and soon to be declared PA in the northeast as an end point. The corridor will be developed around a concept of "low volume, high value" community-centered eco-tourism looking to attract tourists interested in archeology, geology, and other environment-centered experiences while engaging local communities in the operation of the route, and by minimizing the impact of all activities on the environment according to internationally accepted eco-tourism standards. Itineraries along

¹ Largely barren, hard, rocky plateaus

² Pebble Hamada

³ Wadi bed

the corridor will be carefully designed to offer authentic Bedouin experiences with high level of service and co-management with local communities. The proposed route will extend through state-owned land, but because state lands are widely treated as “open use” land, consultations with communities living close to the proposed trail will be undertaken to ensure there is general buy-in. However, the very low and widely scattered population in this area, and very limited employment opportunities mean widespread opposition to the proposed eco-tourism venture is unlikely.

This component will be implemented by RSCN given its mandate to establish and manage protected areas in Jordan (through government by-laws), its record in eco-tourism development and management, and its capacity to engage effectively with local communities in preparing and implementing programs. In 2010 RSCN established the Yarmouk Nature Reserve and implemented a number of donor-funded projects, including the Bank-funded Conserving the Natural and Cultural Landscape of the Surrounding Areas of Ajloun Castle Project, and the GEF-funded Integrated Ecosystem Management of the Jordan Rift Valley Project. RSCN’s role in the IEM Project gives it important experience in the environmental sector, working with Bank projects. Its strategy to further engage with the private sector in its future activities demonstrates good potential for sustainability of interventions in the north, also in line with the second National Tourism Strategy (NTS). RSCN’s role in managing the Al Azraq, Shaumari and Burqu’ sites will facilitate these sites’ engagement in the planned project as important touristic attractions. The component is organized around two sub-components: 1.1 Establishment of an Al Azraq/Shaumari-Burqu’ Eco-Tourism Corridor; and 1.2 community engagement.

Sub-component 1.1: Establishment of an Al Azraq/Shaumari-Burqu’ eco-tourism corridor

This sub-component will begin with the development of an Eco-tourism Management Plan (ETMP) laying out the vision of the corridor, exact siting, intervention points and products development. The ETMP is also expected to provide economically-feasible options for the local population and the private sector for developing eco-tourism services and products. The ETMP will be submitted by the project to the Steering Committee for endorsement. Once the ETMP is endorsed this sub-component will provide necessary visitor management infrastructure and human resources in identified locations along the corridor and enable the proper management of the increase in the number of visitors in these areas. Investments will begin in itineraries close to the Azraq/Shaumari starting point gradually extending toward the Burqu’ end point. This approach is expected to allow the testing of established sites and the build-up of interest amongst Jordanian and international visitors. A strong marketing initiative for the corridor will be carried out applying the business and marketing approaches developed under RSCN’s Wild Jordan division, using a variety of vehicles with the aim of reaching local and international markets, by engaging the Tourism Board, tourism operators, websites, social media and RSCN’s tourism networks.

Starting point - Al Azraq and Shaumari reserves: Investments will be made in Al Azraq, the official starting point of the corridor in order to enhance its potential to attract new and diverse domestic and international tourists and to be used as a promotional starting point of the eco-tourism corridor. Al Azraq currently offers a spring-fed wetland that supports a great variety of migrating birds, buffalos and more. The Al Azraq lodge, which received 5,500 visitors in 2010, has 16 guest rooms, a visitor center, a dining room, an education center and walking and biking

trails connecting the lodge to the reserve. In Al Azraq the project will finance the rehabilitation of the existing bike trails around Al Azraq Reserve as well as equipment necessary to promote the biking experience around the reserve (bicycles, interpretation panels, etc.). Promotional material will be prepared for distribution in Al Azraq and Shaumari, and local guides and rangers will be hired and trained to guide visitors at their preferred itineraries and ensure the integrity of the visited sites, respectively.

The adjacent Shaumari Reserve, a captive breeding site for the Arabian Oryx which was until recently close to extinction, is expected to benefit from a committed USAID US\$1.0 million grant that will finance the restoration of fences, establishment of a safari reception and education facility and upgrade animal husbandry. Given this, the proposed project will not invest GEF funds in Shaumari.

Attractions along the Corridor: The ETMP will identify potential itineraries along the Al Azraq/Shaumari-Burqu' eco-tourism corridor, which may include Rajil (which offers a unique black desert landscape); Begawehyeh (cultural and religious sites, a paved ancient road, bird watching); Dahak (a limestone desert geopark with white calcareous cliffs and isolated rock formations); Safawi (Jawa and Dir El Kahf - caves, antiquities and geological formations); and Grama (site with petroglyphs). The project will finance the following key inputs:

- a) Two 'permanent camps' (20 visitor capacity) consisting of Bedouin style lodging facilities and minimum impact equipment such as solar panels for water heating and electricity and environment-friendly latrines.
- b) Two 'wild camps' consisting of Bedouin tents and simpler environment-friendly equipment Camel trails operated by local camel owners (identification and mapping, basic equipment)
- c) Hiring and training of local youth as rangers and guides, camel expedition guides, etc.
- d) 4x4 vehicles used to mobilize tourists on rough terrains along the corridor
- e) Production of information material

End point - Burqu' Reserve and Protected Area: Burqu' is currently at its final formalization stage as a Protected Area.⁴ Its 650 km² area includes a variety of ecosystems: *Marrab*, *runoff Hamada* and *Harra* resulting in a high botanical diversity (94 species belonging to 25 families). It includes an aquatic habitat, which attracts migratory birds, including raptors, waders and other wetland birds. Rare bird species which can be found in Burqu' include the Imperial Eagle (*Aquila heliaca*, vulnerable), Pallid Harrier (*Circus macrourus*, near-threatened), Saker Falcon (*Falco cherrug*, endangered) and Houbara Bustard (*Chlamydotis undulata*, vulnerable). The *Hammada* is visited by gazelles, hyenas, wolves and foxes. The most important globally threatened mammals recorded in Burqu' are the Sand Cat (*Felis margarita*) and the Goitered Gazelle (*Gazella subgutturosa*). Burqu' also has important archaeological sites, including cairns, ruins and especially the Qasr Burqu', which date back in the Byzantine Period and in the end of the Roman Stage.

Investments in Burqu' as the eco-tourism corridor's final destination, will focus on the establishment of an eco-lodge in the proximity of the Burqu' fort and adjacent facilities as well

⁴ Pending Cabinet approval.

as capacity building for provision of services by local communities. Alternatively, and depending on the recommendations of the ETMP, a permanent Bedouin camp site will be established in Burqu' while the eco-lodge will be located along the route between Al Azraq and Burqu' at a site offering unique landscape experience. Specifically, investments in Burqu' will include:

- a) Eco-lodge (10-room capacity), including a visitor center/museum looking at the Eastern Badia unique features (rock inscriptions, fossils, cultural heritage, biodiversity) and minimum impact equipment such as solar energy panels for water heating and electricity, environment-friendly latrines and graywater treatment facilities
- b) –OR- Permanent Bedouin campsite (20 visitors capacity), following an eco-friendly design and using minimum impact equipment
- c) Reception area
- d) Radio equipment
- e) Activity-related equipment for visitors such as nature watching (binoculars and telescope) and information material
- f) A camel trail operated by local camel owners
- g) Hiring and training of local rangers and guides, and ranger/guide kits and posts
- h) Capacity development and technical training of local people in the areas of food services, hospitality, management and customer service
- i) Hiring of community liaison officers to ensure continual consultation and communication between the project and nearby communities.

RSCN, as the proposed component's implementing entity will make available staff, equipment and in-house expertise in the areas of tourism management planning, community liaison, product development, marketing, design, collection and fee management and project management. It is expected that the route will be developed, tested and marketed during the first three years of the project, and begin operating during the fourth year. RSCN will be responsible for the operation of the eco-tourism corridor, including the campsites and eco-lodge during and after the project following its management practices as currently used in the Dana, Ajloun, Mujib and Azraq reserves. Revenue raised from entrance and lodging fees will be used to cover investments and running costs as they relate to the itineraries along the corridor and Burqu', excluding Azraq and Shaumari which are already self-sustaining. Appropriate mechanisms as a how to share eco-tourism proceeds with the concerned communities will have to be sought. RSCN has different practices in its other administered PAs but a specific suitable approach for the corridor would be analyzed during the elaboration of the ETMP.

Sub-component 1.2: Community engagement

Sub-component 1.2 will work to ensure that communities living in Ar Ruwaished and other smaller villages close to Burqu' as well some along the corridor are fully engaged in, and directly benefit from, the eco-tourism activities. This will involve consulting with, and engaging, these communities early in the planning and development of the proposed eco-tourism activities. Attention will be paid to raising the awareness of the population about the fragility of the local environmental resources, the need to support and finance protective measures, and the benefits (financial and other) that can accrue to the community from well-formulated and implemented eco-tourism activities. The roles communities could play in the supply chain for eco-tourists will be stressed, including new job creation opportunities such as reserve rangers, guides, service

provision, camp and eco-lodge operation, etc. The significant opportunities that could be provided for women and youth will be highlighted. The provision of training opportunities and the possibility for new IGAs (leather goods production, camel tours, local herb and medicinal plant sales, basket weaving, indigenous performances, etc.) associated with eco-tourism will also be stressed. Experience from the Dana reserve will help validate the potential opportunities for the communities.

The project will continue through its lifespan to actively engage the communities in the eco-tourism activities and ensure that they directly benefit from it.

Component 2: Sustainable rangeland management and livelihoods support in the southern Badia (Total GEF (without contingencies): US\$1,282,500, Co-financing (without contingencies): US\$210,550

The purpose of the component is to support the development of a more sustainable natural resource base for local communities. Livestock rearing (principally sheep, but also goats) is the core livelihood and an important source of income for a majority of the Bedouin population which lives in the southern Badia. The degradation of the southern Badia, which has been exacerbated by continued drought, has further constrained the availability of already scarce water resources and rangeland for livestock. For the same reasons but also due to disrupted traditional rangeland management practices with consequential overgrazing, plant re-growth and the overall length of the grazing seasons have also dramatically decreased. As a result, water is being fetched and truck-transported to the herds from far distances at a very high cost; and the feeding contribution from grazing has reduced to a mere ten percent (while it used to be 25-30 percent), obliging the livestock owners to provide for their sheep and goats almost exclusively with purchased feed. The component is thus organized around three sub-components: 2.1 Water harvesting; 2.2 Rangeland rehabilitation; and 2.3 Livelihoods maintenance and support.

Sub-component 2.1: Water harvesting

Water harvesting for animal drinking purposes through *hafirs*⁵ would be pursued in both poverty pocket areas: Al Husseinieh and Al-Jafr. A large number of animals are kept in the rangeland areas at significant distances from the main towns and villages (where deep boreholes are overused, deepening further the water table). A number of *hafirs* have been constructed in the past by the Ministry of Agriculture, including in Al Husseinieh. However, due to design, construction features and high evaporation rates, water in these *hafirs* generally lasts only for two to three months.

A modified *hafir* model (2 in number) in terms of shape and geological characteristics of the site, would be constructed under the project in a manner that would enable water availability for six to seven months. The water holding capacity would be between 50,000⁶ and 100,000 m³. While the exact site of the *hafirs* will be based on hydrological, topographic and geological technical investigations, the interest area where the *hafirs* would be located will be decided with the communities (those that would directly benefit as well as those living in the surrounding areas which may be affected). A consultation-based design process with the concerned communities

⁵ Traditional name of reservoirs for animal watering.

⁶ Theoretically able to satisfy annual water needs of about 12,000 and 25,000 sheep, respectively.

will be coordinated by NCARE watershed specialists (technical and socio-economists) but operated by HFJBD (see subcomponent 2.3), which has practice with communities and associations in the target locality, and which has deep experience and specialization in community participation and engagement. Aspects of land ownership and use rights will need to be considered carefully, and will be a focus of community engagement efforts. Agreements would be reached with the community, through the community engagement process for proper management and maintenance of the *hafirs* after the project. NCARE will ensure their continued maintenance.

Following a similar approach, small cisterns and manufactured tank structures (25 in number) for human drinking water will also be provided. The cisterns would be built following construction criteria that will ensure water quality maintenance.⁷ The project would cater for all costs entailing studies, design and maintenance of works' services (implementing partners contribution); works, goods and services (GEF financing); and management of works (community contribution).

Sub-component 2.2: Rangeland rehabilitation

Badia rangeland productivity is low and has further decreased from 80 kg DM⁸/ha in 1990 to 40 kg DM/ha in 2006.⁹ As a result, the grazing period in the rangelands of the southern Badia lasts only two weeks, and at best - twice a year (late autumn and spring).

The project intends expanding in a sustainable manner the feeding calendar of the herds by improving the range and fodder production services of the Badia. The MoA has pursued since the 1940s rangeland rehabilitation through different techniques, including the establishment of rangeland reserves. Most of these experiences have been controversial, costly and difficult to implement. However, during the last five years, a new approach is beginning to show some positive results; it involves a significantly greater involvement of communities in rangeland management.

From the technical point of view, the range reserves encompassing an area of 20,000 dunums (with an approximate carrying capacity of 8,000 sheep), include contour bunding for water conservation; replanting with palatable and nutritious indigenous species (e.g., *Atriplex sp.* and *G. Saxola*) over 25 percent of the area; and setting-aside the reserve area for a period of two years. The actual innovation of the 'new generation' reserve is that these areas are not fenced nor patrolled by MoA guards as was the practice in the past, but instead involved communities are trained and given both responsibility and authority over the management of the reserve area. The community engagement aspects of this approach remain somewhat nascent and require strengthening, such that their authority over the reserve is made more explicit.

⁷ "Rainwater Cisterns: Traditional technologies for dry areas"; ICARDA, 2009.

⁸ DM=Dry Matter.

⁹ Ministry of Environment/MoE (Hashemite Kingdom of Jordan Country Environmental Analysis, World Bank, 2009).

This sub-component supports the establishment and operation of two pilot sites where community engagement in the identification, management and maintenance of rangeland reserves will be strengthened (see subcomponent 2.3). The emphasis will be on transferring not only responsibility for site management to the pilot communities, but also the authority for its rehabilitation and maintenance. The rangeland reserve areas to be identified by the communities will be on state-owned land, but the government will, under this pilot initiative, formally grant the pilot communities increased authority over the reserve areas.

The communities will be directly involved in the design of this pilot initiative from the outset, including in the selection of the reserve sites, and in all decisions regarding the choice of species to be used in replanting, water conservation and harvesting, and in the approaches to be followed in managing and monitoring the reserve. Central to this effort will be the acceptance of the community that reserve areas will need to be closed to livestock grazing for a two year period to allow for rehabilitation of plant species.

Under this component the project will also expand on NCARE's experiences in the *Marrabs* (as is being tested by the Benchmark Study supported by IFAD in the Amman governorate) in green fodder production. Fodder schemes (e.g., barley-atrilex rotation) would be implemented with supplementary irrigation by gravity conveyance over a total area of 5,000 dunums in the command area of the *hafirs* (subcomponent 2.1), and elsewhere through 'water spreading' techniques. All technical aspects will be the responsibility of NCARE. The project would cater for all costs entailing studies, design and maintenance of works' services (implementing partners contribution); works, services and goods (GEF financing); and management of works (community contribution).

Sub-component 2.3: Maintaining and enhancing livelihoods in pilot communities

Key in ensuring community buy-in and participation in the implementation of the activities under subcomponents 2.1 and 2.2 will be the continued engagement of the HFDJB through the lifespan of the project. The HFDJB has strong links with the pilot communities, a very good understanding of their socio-economic situation, and experience in working with local Cooperatives and other entities. The HFDJB will work continuously with the pilot communities to identify the location areas, facilitate the participatory design, and subsequent management of the project *hafirs* and drinking water cisterns; enhance local knowledge of rangeland restoration practices; build community cohesion and agreement around the proposed rangeland restoration and reserve activities; ensure that decision making reflects the general opinions of the broader community; and provide conflict resolution support when needed. The HFDJB will, of course, liaise closely with NCARE and MoA technical staff.

Because rangelands have been degraded by overgrazing and prolonged drought, grazing capacity has steadily declined to the point that animals are now predominantly grain-fed. The cost of this animal feed has increased fairly significantly as government subsidies for feed have been reduced. As a consequence, many households in the poverty pockets have had to sharply reduce their herds and are sinking deeper into poverty. Rangeland restoration should reduce expenditures on feed by extending the period for open grazing. However, a two year period is required for rangeland regeneration, after which continued careful management is required. To slow poverty during this rangeland regeneration period, improve livestock health and resilience,

and support community members, particularly women, in pursuing new or alternative income generating activities, the project will provide a range of livelihood support. Specifically, this will include:

- Training and other inputs for livestock owners to improve the health and quality of their animals. Access to targeted veterinary services, provision of mineral supplementation blocks, regular livestock vaccination and parasite control programs, training in the use of by-products and other relevant training will be supported.
- Provision of training and assistance for the establishment of community managed irrigated fodder areas (one in each pilot area) will be supported. The areas to be assigned for this purpose will be identified and agreed upon by the community, but will be on state-land. Basic infrastructure for the irrigation and training in sustainable farming methods will be supported. The community, through a community co-operative, will establish guidelines for operation, maintenance and distribution of benefits.
- Capacity building will be provided to existing women's cooperatives having broad-based membership in each of the communities. The capacity building will aim to strengthen the cooperatives' management, outreach and ability to effectively manage and distribute small grants. The project will provide a small once-off fund to each of the participating women's cooperatives so they can arrange for training to be provided members in micro-business skills (e.g. cheese production, sewing, herb production, etc.) and management. The cooperatives will provide members who have completed training with small seed funds to support the launch of their micro-business.
- Training and short-term employment for interested youth in target communities on rangeland restoration and management and good animal husbandry. Youth who have received such training will qualify for possible employment in rangeland restoration and replanting activities supported by the project.
- Awareness/training on quality maintenance of drinking water in cisterns will also be provided;
- Capacity building will come also through HFDJB provided small grants (JD 10,000 each) to engaged cooperatives (10 in total) as a start-up financing of IGAs that will be decided and designed together with the concerned communities. This would also entail training and support to marketing.

The project would cater for all costs entailing studies (implementing partners financing); works, goods and community engagement (GEF financing); and management of works (community contribution).

Component 3: Project Management and Monitoring and Evaluation (Total GEF financing (without contingencies): US\$288,635; co-financing (without contingencies): US\$960,525)

The objective of this component is to develop an effective Project Management Unit (PMU) capable of directing and supporting project implementation, liaising with stakeholders and carrying out monitoring and evaluation according to agreed indicators. NCARE will establish a PMU consisting of a project manager, fiduciary staff and an M&E specialist, reflecting previously successful GEF and non-GEF projects in Jordan. In terms of the involvement of other key stakeholders and partners in project implementation, a Steering Committee will be formed to guide and monitor overall progress. The implementing entity for component 1, RSCN, will

appoint a component manager who will ensure the effective and efficient implementation of agreed work plans, and reporting to NCARE. The proposed entity for community engagement and capacity building in the Southern poverty pockets, Hashemite Fund for the Development of Jordan Badia (HFDJB), will also appoint a focal point responsible for managing the agreed activities and coordinating with the PMU. A Technical Committee, chaired by the project manager and comprising an experienced technical expert from each implementing partner (NCARE, RSCN and HFDJB), will discuss technical issues and enable information exchange between project activities as needed. An M&E system will be developed from the outset of the project, with the involvement of all key partners. The system will be supervised by the PMU, but some individual partners will have responsibility for providing data. It will be designed to track progress and performance at three main levels (i) basic progress over time in relation to the achievement of scheduled activities and outputs; (ii) income and expenditure against budget allocations; and (iii) project impact in relation to the approved outcome indicators. Reporting formats will be developed and quarterly reports will be prepared according to World Bank guidelines. The PMU will also be responsible for providing relevant project data to the Database and Information Unit (DBIU), funded by the Badia Restoration Program (BRP) and hosted by HFDJB.

Results Framework

Project Development Objective (PDO): To sustain livelihoods by enhancing ecosystem services in three poverty pockets of the Jordan Badia											
PDO Level Results Indicators*	Core	Unit of Measure	Baseline	Cumulative Target Values**				Frequency	Data Source/ Meth.	Resp. for Data Collection	Description (indicator definition etc.)
				YR 1	YR 2	YR 3	YR 4				
Indicator One: Number of new sustainable eco-tourism- related jobs along the Al Azraq/Shaumari-Burqu' corridor		Number	0	-	20	40	150	Annually starting YR2	Reports	RSCN	Income generating activities, providing income at the time of Implementation Completion Review Report
Indicator Two: Acreage of rangelands managed by communities in a sustainable manner in Al Jafr and Husseinieh		Dunum	0	-	10,000	30,000	30,000	Annually starting YR2	Reports	NCARE	Area replanted, extended grazing period and sustainable carrying capacity
Indicator Three: Number of men and women benefitting from		Number	0	800	1,500	3,000	4,000	Annually	Reports	RSCN and NCARE	Training, awareness raising,

project capacity building in Ar Ruwaished, Al Jafr and Husseinieh poverty pockets											community empowerment (North: 500; South: 3500)
INTERMEDIATE RESULTS											
Intermediate Result (Component One): Established eco-tourism in the Northern Badia											
Intermediate Results Indicators*	Core	Unit of Measure	Base line	Cumulative Target Values**				Freq.	Data Source/ Meth.	Resp. for Data Coll.	Descr. (indicator definition etc.)
				YR 1	YR 2	YR 3	YR 4				
<i>Intermediate Result Indicator One:</i> Eco-tourism Management Plan (ETMP) developed and approved by the Steering Committee		Yes/No	No	Yes	-	-	-	Quarterly	Reports	RSCN	
<i>Intermediate Result Indicator Two:</i> First eco-tourism destination piloted		Yes/No	No	No	Yes	-	-	Annually	Reports	RSCN	East of Azraq/Shaumari reserves; as per ETMP approach
<i>Intermediate Result Indicator Three:</i> Eco-tourism infrastructure established		Percentage	0	-	10	80	100	Annually	Reports	RSCN	As per ETMP
<i>Intermediate Result Indicator Four:</i> Number of target stakeholders trained on eco-tourism services		Number	0	0	100	250	250	Annually	Reports	RSCN	

Intermediate Result (Component Two): Rehabilitated rangelands in two poverty pockets in the Southern Badia

[illegible]

PDO Level Results Indicators*	Core	Unit of Measure	Base line	YR 1	YR 2	YR 3	YR 4	Freq.	Data Source/ Meth.	Resp. for Data Coll.	Descr. (indicator definition etc.)
<i>Intermediate Result Indicator One:</i> Effective M&E system in place		Qualitative	No M&E system in place	M&E system in place	M&E system being utilized by PMU to produce progress reports			Annual	Reports		
<i>Intermediate Result Indicator Two:</i> Availability of Technical Committee's minutes of meetings		Yes/No	No	Yes	Yes	Yes	Yes	Quarterly	Minutes	NCARE	
<i>Intermediate Result Indicator Three:</i> Availability of Steering Committee minutes of meetings		Yes/No	No	Yes	Yes	Yes	Yes	Bi-annually	Minutes	NCARE	

Implementation Arrangements

General arrangements

The designated implementing agency of the project is the National Centre of Agricultural Research and Extension (NCARE). The project will be managed through a lean **Project Management Unit** (PMU) housed in NCARE. The PMU will manage the activities of all implementing partners. These include:

- NCARE
- RSCN
- HFDJB

The PMU will be headed by a Project Manager (PM) and will avail itself of a **Technical Committee** (TC), chaired by the project manager of the PMU. An experienced technical expert from each implementing partner (NCARE, RSCN and HFDJB) will be a member of the TC. It will discuss technical issues and enable information exchange between project activities as needed, and will provide technical advice and guidance on various aspects of project implementation, including decision making on technical activities, M&E and guidance on project implementation at all stages. The TC will also provide recommendations to be discussed at the Steering Committee level, and will hold quarterly meetings, or more often as required. MoPIC would also participate as a member of the TC, however, its role will be clarified during project appraisal.

The PMU will be guided by a **Steering Committee** (SC), chaired by the Secretary General of MoPIC. Based on consolidated implementation progress reports submitted quarterly by the PMU, the SC will provide strategic guidance and oversight for the project, advise on corrective measures, and be responsible for approving annual work plans and associated budgets submitted by the PMU. The SC will comprise high-level representatives from key ministries and institutions that will have an influential role in the Jordan Badia. The SC will include the following members:

- Ministry of Agriculture (MoA)
- Ministry of Environment (MoE)
- Ministry of Water and Irrigation (MoWI)
- Ministry of Tourism and Antiquities (MoTA)

And senior management from:

- NCARE
- RSCN
- HFDJB

The Terms of Reference for the SC will be reflected in the Project Operational Manual (POM). The Project Manager of the PMU will act as Secretary to the SC. The SC will hold bi-annual meetings, or more often as required.

NCARE meets the criteria necessary for optimal project implementation and sustainability, and has an internationally reputed capacity in R&D and sustainable natural resources management.

It will be in charge of overall project management through the PMU, and directly in charge of the project sustainable rangeland management activities in Southern Badia under component 2.

RSCN is a well acknowledged NGO which has the national mandate to establish, protect and manage all Protected Areas in Jordan. With its established track record and strong technical capacity, RSCN has made a name in eco-tourism development. In view of its exclusive mandate for managing Protected Areas in Jordan, RSCN will be appointed for the project eco-tourism development activities in the Northern Badia under component 1.

The **HFDJB** is by Royal Decree (enacted in 2006) the institution mandated for sustainable development of the Jordan Badia through active participation of the communities that live therein. In view of its special mandate for the Jordan Badia, the Fund will assist NCARE and be appointed for all community engagement and capacity building activities of the communities in project intervention areas of the Southern Badia. It would also assist RSCN with suitable approaches for engaging communities in eco-tourism and livelihoods development in the Northern Badia.

The PMU will also seek close collaboration with a number of key stakeholders who operate in the three poverty pockets included in the project (Ar Ruwaished, Al Husseinieh and Al Jafr). These include (but not exclusively) the Enhanced Productivity Program (EPP) of MoPIC and its partner implementing agencies, i.e. the Jordan River Foundation (JRF) and the Community Centers Agency (CCA) that work, respectively, on EPP's third phase poverty alleviation program in Al Husseinieh, Al Jafr (JRF) and in Ar Ruwaished (CCA).

It is crucial for project success that the PMU operate in a flexible, transparent and collaborative manner with all concerned partners. To this end, the TC will be a key tool. The PMU will recruit competitively a proficient project manager with acknowledged project management and Badia experience, on ToRs acceptable to the Bank. NCARE will establish the PMU and identify and select the project manager *prior to project effectiveness*.

Project Management

The PMU will:

- prepare annual work plans and budgets;
- supervise and monitor implementation of project components;
- ensure liaison, communication, collaboration and joint problem-solving between the implementing entities and other stakeholders;
- promote the active participation and contribution of the local population and NGOs;
- report to the SC on a quarterly basis on the implementation progress
- ensure appropriateness of procurement and financial management activities as per agreed terms;
- ensure adherence and implementation of approved safeguard instruments;
- provide quarterly and annual progress reports in a format agreed with the Bank;
- facilitate organization of Steering Committee meetings.

The PMU will manage the project activities of the three implementing partners:

- NCARE, which will implement (on a force account basis) the water harvesting and rangeland rehabilitation activities in the Southern Badia (sub-components 2.1 and 2.2); and will use the related operational or running costs, as well as the GEF financial provisions for Project Management;
- RSCN, which will be appointed on a single-source basis, will implement the establishment of the community-centered eco-tourism corridor (component 1); and will use the related operational/running costs.
- HFDJB, appointed on a single-source basis, will implement the community engagement activities in the Southern Badia (sub-component 2.3).

The PMU will ensure optimal coordination among project partners in order to achieve synergy among relevant activities, and therefore have a crucial coordinating role in linking the key players. NCARE will have a prominent role as the lead implementing agency. The PMU will be staffed with a Project Manager and a qualified M&E specialist. ToRs for these positions will be provided by NCARE and endorsed by the Bank. All staff will be recruited competitively. NCARE will provide procurement and financial management from within its organization. Small implementation units will be established at RSCN and HFDJB.