GEF-8 REQUEST FOR CEO ENDORSEMENT/APPROVAL

TABLE OF CONTENTS

GENERAL PROJECT INFORMATION 3

Project Summary 4

Project Description Overview 4

PROJECT OUTLINE 7

A. PROJECT RATIONALE 7

B. PROJECT DESCRIPTION 17

Institutional Arrangement and Coordination with Ongoing Initiatives and Project 41

Core Indicators 44

Key Risks 47

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES 50

D. POLICY REQUIREMENTS 51

Gender Equality and Women's Empowerment 51

Stakeholder Engagement 52

Private Sector 52

Environmental and Social Safeguards 52

E. OTHER REQUIREMENTS 52

Knowledge management 53

Socio-economic Benefits 53

ANNEX A: FINANCING TABLES 53

GEF Financing Table 53

Project Preparation Grant (PPG) 54

Sources of Funds for Country Star Allocation 54

Focal Area Elements 54

Confirmed Co-financing for the project, by name and type 55

ANNEX B: ENDORSEMENTS 55

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s): 55

ANNEX C: PROJECT RESULTS FRAMEWORK 55

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG) 61

ANNEX E: PROJECT MAP AND COORDINATES 62

ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING 65

ANNEX G: BUDGET TABLE 65

ANNEX I: RESPONSES TO PROJECT REVIEWS 67

General Project Information

Project Title Promoting Sustainable Rangeland Management and Restoration Practices and Strategies to Achieve LDN in the Northern Badia of Jordan	
Region Asia	GEF Project ID 11872
Country(ies) Jordan	Type of Project MSP
GEF Agency(ies): IUCN	GEF Agency Project ID P04887
Project Executing Entity(s) MINISTRY OF ENVIRONMENT of Jordan	Project Executing Type Government
GEF Focal Area (s) Land Degradation	Submission Date 5/11/2026
Type of Trust Fund GET	Project Duration (Months) 48
GEF Project Grant: (a) 1,784,862.00	GEF Project Non-Grant: (b) 0.00
Agency Fee(s) Grant: (c) 160,638.00	Agency Fee(s) Non-Grant (d) 0.00
Total GEF Financing: (a+b+c+d) 1,945,500.00	Total Co-financing 12,035,414.00
PPG Amount: (e) 50,000.00	PPG Agency Fee(s): (f) 4,500.00
Total GEF Resources: (a+b+c+d+e+f) 2,000,000.00	
Project Tags CBIT: No NGI: No SGP: No Innovation: No Competitive Window: No	
Project Sector (CCM Only)	

Taxonomy

Influencing models, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Demonstrate innovative approache, Stakeholders, Private Sector, SMEs, Individuals/Entrepreneurs, Beneficiaries, Local Communities, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, Type of Engagement, Information Dissemination, Participation, Partnership, Consultation, Communications, Awareness Raising, Education, Capacity, Knowledge and Research, Capacity Development, Knowledge Generation, Training, Professional Development, Workshop, Field Visit, Knowledge Exchange, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Access and control over natural resources, Participation and leadership, Access to benefits and services, Knowledge Generation and Exchange, Land Degradation, Focal Areas, Sustainable Land Management, Restoration and Rehabilitation of Degraded Lands, Sustainable Livelihoods, Sustainable Agriculture, Improved Soil and Water Management Techniques, Land Degradation Neutrality, Land Cover and Land cover change, Carbon stocks above or below ground, Integrated Programs

Rio Markers

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	No Contribution 0	Significant Objective 1	Principal Objective 2

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. (max. 250 words, approximately 1/2 page)

About 41 percent of Jordan's land area is degraded while 22 percent is classified as moderately degraded. The Irano-Turanian bio-geographical zone grappling with unsustainable agricultural practices, overgrazing, water scarcity, and climate change, leading to soil degradation, desertification and poor decision making. This project will use a transformative approach involving tailored gender sensitive restoration and conservation, innovative data curation, and environmental modelling, and also validate national land degradation data on the UNCCD 2022 Dashboard based on UNCCD LD indicators. This will be achieved through 1) LDN Assessment and tailored restoration interventions, 2) Integrated gender sensitive SLM Framework and Environmental Decision Support System, 3) Gender responsive and participatory knowledge management & communication, and 4) Monitoring, evaluation and accountability. The project will generate significant global environmental benefits via: (i) improved management of 731 hectares of the rangeland reserves; (ii) apply sustainable land management practices (SLM) over approximately 500 ha of degraded agricultural lands and restoration of 750 hectares of degraded rangeland; (iii) improved management of 18,000 hectares of Key Biodiversity Areas, and (iv) significant climate mitigation co-benefits through an estimated sequestration of 735,127 metric tons of CO_2 equivalents over 20 years, generated primarily through land restoration and sustainable land management. The project will benefit 10,000 people, including 6,000 women and 4,000 men. The project will support Jordan to achieve its LDN voluntary targets (LDN-TSP 2018). This project aligns with GEF-8's Land Degradation (LD) focal area and will contribute to SDG targets 12.2, 15.1, 15.3, 15.5, and targets 1 and 2 of the Kunming-Montreal Global Biodiversity Framework. The project will be implemented by the International Union for Conservation of Nature (IUCN) through a total budget of USD 13,784,862 (GEF USD 1,784,862 and co-financing USD 12,000,000).

Project Description Overview

Project Objective

Objective: To restore degraded rangelands and promote Land Degradation Neutrality in the northern Badia of Jordan through evidence-based land-use planning, sustainable management practices, and strengthened institutional capacity.

Project Components

Component 1 Developing LDN assessment and implementing tailored restoration interventions in Irano-Turanian biogeographical zone

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
732,625.00	3,254,200.00

Outcome:

1.1. LDN assessment and restoration interventions driven by accurate, comprehensive, and accessible bio-geographical data and models

Output:

1.1.1. Land Degradation Neutrality in the Irano-Turanian assessed and the most vulnerable and sensitive hotspots in the Irano-Turanian Zone identified with multicriteria analysis, cost/benefit analysis, and hotspot analysis.

1.1.2. Tailor-Made gender inclusive community-led restoration interventions involving local community participation implemented in the most vulnerable and sensitive hotspots in the Irano-Turanian Zone

1.1.3. Land cover dynamics, soil organic carbon content, and Net Primary Productivity (NPP) Dynamics validated in support of achieving land degradation neutrality (LDN) objectives in the Irano-Turanian Zone for sustainable land management

Designing and Implementing Environmental Decision Support System

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
571,683.00	3,448,250.00

Outcome:

2.1. Improved land use planning and sustainable land management in the Irano-Turanian zone, leading to a more inclusive and productive decision-making system

2.2. Sustainable livelihoods and rangeland-based value chains strengthened to support adoption of sustainable land management practices in the northern Badia

Output:

2.1.1. Accurate, Validated, and Integrated LDN Database Developed and in Operation

2.1.2. Environmental decision support system (EDSS) designed and implemented

2.2.1. Community-managed revolving fund established and operational

2.2.2. Markets for rangeland-based products developed and promoted

2.2.3. Priority rangeland-based value chains developed and promoted

Gender responsive and community engaged knowledge management & communications

Component Type	Trust Fund
Technical Assistance	GET

GEF Project Financing ($)	Co-financing ($)
227,663.00	3,062,600.00

Outcome:

Project results promote learning, feedback, and knowledge sharing for sustainable land management

Output:

3.1.1. A gender-inclusive knowledge management and communication strategy developed and tailored to project interventions, with a knowledge management platform and governorate-level knowledge action networks established and implemented

3.1.2. Stakeholder engagement plan and gender action plan for sustainable land management developed and tailored to project interventions

3.1.3. Traditional knowledge related to land use and resource management documented and applied in project implementation

3.1.4. Gender-responsive sustainability plan and exit strategy developed and integrated in project implementation

* A governorate in Jordan is a primary administrative division, headed by a governor. Each governorate is responsible for local government departments, development projects, and service delivery within its jurisdiction, which typically encompasses multiple districts or municipalities.

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
100,000.00	1,134,750.00

Outcome:

4.1. Project effectiveness and accountability are enhanced, ensuring the achievement of project outcomes and outputs through continuous monitoring, evaluation, and adaptive management

Output:

4.1.1. Project Monitoring and Evaluation Framework Developed and Implemented

4.1.2. Project Progress Monitored and Evaluated Towards Achievement of Mid-Term Targets

4.1.3. Project Progress Monitored and Evaluated Towards Achievement of Terminal Targets

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
Component 1 Developing LDN assessment and implementing tailored restoration interventions in Irano-Turanian biogeographical zone	732,625.00	3,254,200.00
Designing and Implementing Environmental Decision Support System	571,683.00	3,448,250.00

Gender responsive and community engaged knowledge management & communications	227,663.00	3,062,600.00
M&E	100,000.00	1,134,750.00
Subtotal	**1,631,971.00**	**10,899,800.00**
Project Management Cost	152,891.00	1,135,614.00
Total Project Cost ($)	**1,784,862.00**	**12,035,414.00**

Please provide Justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

The Hashemite Kingdom of Jordan, located in the Middle East, is a country of notable geopolitical and environmental significance. It is situated on the eastern bank of the Jordan River, bordered by Syria to the north, Iraq to the east, Saudi Arabia to the south and southeast, and Palestine to the west. Jordan spans an area of about 89,342 km²[1][1] and is home to a population of approximately 11.4 million people, with an annual growth rate of 1.6%[2][2]. Approximately 8% of Jordan's population resides in rural areas, and around 31% of the population is under 15 years of age.[3][3] According to the World Bank collection of development indicators, Jordan's GDP per capita (2023) is US$ 4,456 with an annual growth rate of 1.04% (2023). Jordan's overall development can be categorized as medium, as reflected in its Human Development Index (HDI) score of 0.720, indicating progress in health, education, and income. However, challenges remain, particularly regarding gender equality. The country's Gender Inequality Index (GII) stands at 0.471, pointing to disparities between men and women in areas like reproductive health, empowerment, and economic activity. In terms of poverty, Jordan grapples with multidimensional poverty, with approximately 0.4% (2021) of the population (about 48,000 people) considered multidimensionally poor. An additional 0.7% (77,000 people by 2021) are vulnerable to multidimensional poverty.[4][4] This index provides a more comprehensive view of poverty beyond income, evaluating deprivations in education, health, and living standards. The country's diverse topography includes three main regions: the north-western central highlands (featuring Mediterranean forests and the Irano-Turanian steppe), the western low-lying Jordan Valley with subtropical conditions, and the eastern arid desert (Badia) covering 80% of the country.[5][5] This varied landscape fosters a range of ecosystems and biogeographical regions, making Jordan an ecologically diverse country.

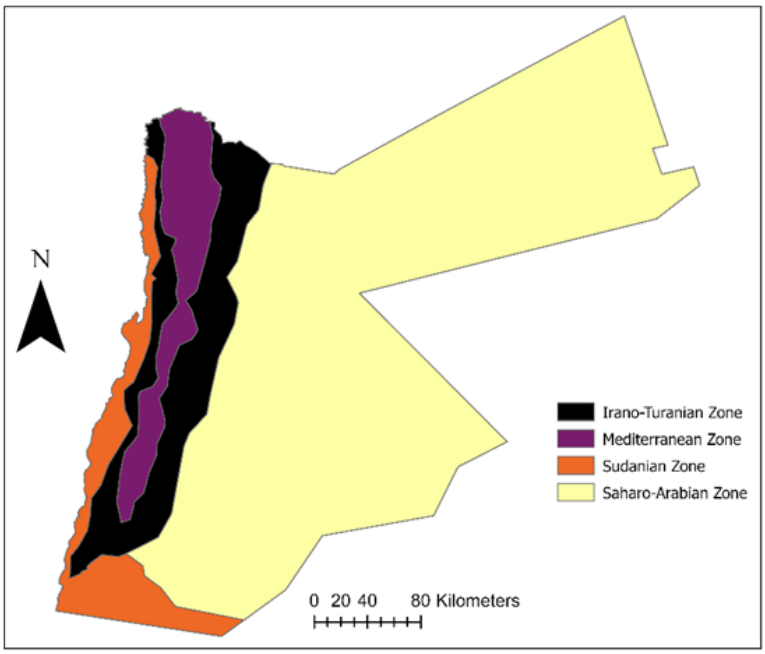


Figure 1. Location of the Irano-Turanian biogeographical zone within Jordan and its relation to other biogeographical zones

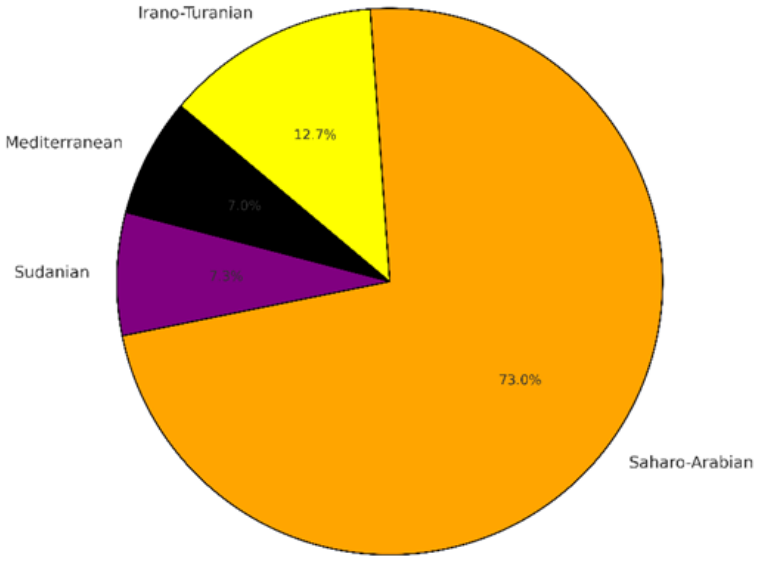


Figure 2. The percentage of each biogeographical zone, showing that Irano-Turanian zone is about 13% of jordan terresetrial area. Irano-Turanian zone

Among these biogeographical regions, the Irano-Turanian biogeographical zone holds significant environmental importance which is a crucial bioclimatic region that extends across the Middle East and Central Asia, encompassing parts of Jordan, Iran, Turkey, and Afghanistan. The Irano-Turanian zone in Jordan is characterized by a semi-arid climate and spans altitudes of 500 to 700 meters above sea level, with annual rainfall ranging between 150 to 300 mm.[6][6]. The zone experiences mean minimum annual temperatures of 2–5°C and mean maximum temperatures between 15-25°C.[7][7], reflecting its transitional climatic conditions. In Jordan, this zone forms a narrow strip covering approximately 4,215 sq. km, encircling the Mediterranean ecozone, [8][8] (Figure 1). This zone serves as a

transitional area between the Mediterranean and Saharo-Arabian regions, acting as a buffer against desertification and desert expansion and supporting carbon sequestration through its semi-arid and steppe vegetation. Its ecological functions are vital for maintaining biodiversity, sustaining water cycles, and enhancing landscape resilience against climate change impacts, making it a priority for restoration and sustainable land management efforts.

Table 1. The land use within the Irano-Turanian biogeographical

Table 1. The land use within the Irano-Turanian biogeographical

Land class	Area %
Bare Soil	31
Bare Rocks	27
Pastures	11
Field Crops	10
Wadi Deposits	6
Sand dunes	4
Not Defined	3
Tree Crops	2
Chert Plains	2
Vegetables Crops	1
Basaltic Rocks	1
Dry Mudflat	1
Urban Fabric	1

Table 1. Land-use data for northern Badia

Land-Use Type	Area (km²)	Percentage of Total Area
Rangeland/Pasture	12,500	53.1%
Rainfed agriculture	3,200	13.6%
Irrigated agriculture	1,000	4.2%
Urban/Built-up areas	250	1.1%
Bare/Desert land	5,800	24.7%
Water bodies	120	0.5%
Forest/Woodland	300	1.3%
Other/Mixed land-use	1,000	4.2%
Total	**23,170**	**100%**

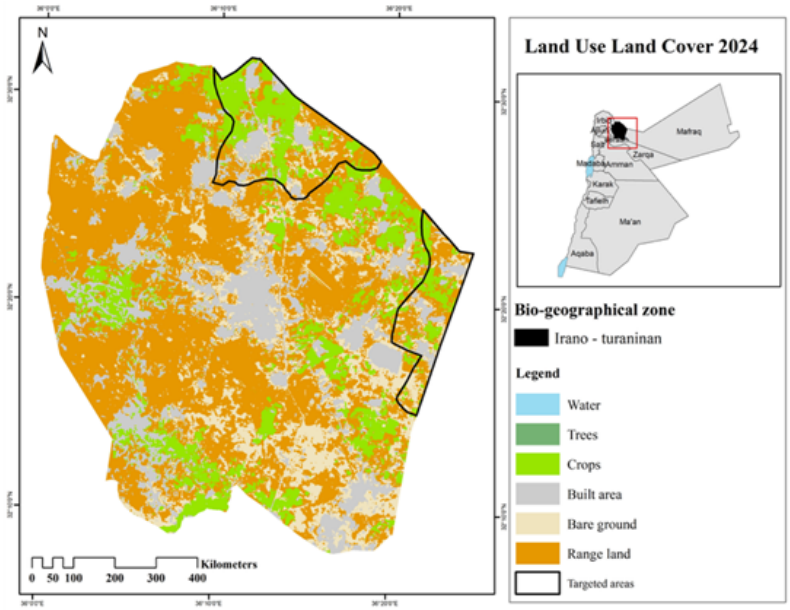


Figure 1. Land use in the northern Badia

The soil in the Irano-Turanian zone is predominantly calcareous or wind-blown, making it less suitable for agriculture and primarily used for grazing. The vegetation is predominantly characterized by chamaephytes—dwarf shrubs that parts die back during the dry summer period. However, some scattered trees, such as *Pistacia atlantica* and *Ziziphus lotus*, can be found in the zone. Characteristic plant species include *Artemisia herba-alba*, *Noaea mucronata*, *Retama raetam*, *Salvia dominica*, *Ballota undulata*, *Anabasis syriaca*, and various grasses, bulb plants, and herbs. These species are adapted to withstand drought conditions, with key pasture and forage

species like *Artemisia herba-alba*, *Retama raetam*, *Astragalus* spp., *Trigonella* spp., *Stipa* spp., and *Festuca* spp. providing grazing resources for livestock. [9][9]

The environmental significance of the Irano-Turanian zone extends beyond its local context. The zone forms a significant portion of

the land area of Jordan (Figure 2). It plays a vital role in shaping the country's ecological and diversity. Its importance lies not only in its biodiversity but also in its contribution to ecological resilience, water retention, and traditional livelihoods such as pastoralism and herbal foraging. The region provides critical ecosystem services that are of global importance. The vegetation in the Irano-Turanian zone acts as a carbon sink, sequestering CO^2 from the atmosphere and mitigating the climate impact.[10][10] The region plays a role in maintaining groundwater levels, promoting regional hydrological cycles, and regulating water quality—all of which are vital for agricultural production and overall environmental stability. The plant life in this zone, including supports wildlife diversity, including over 130 species of migratory birds and various small mammals and reptiles. This biodiversity is essential for maintaining the health of global ecosystems.

The land use in the Irano-Turanian zone is a blend of natural and agricultural areas, with the majority of the land classified as bare soil (31%) and bare rocks (27%) (Table 1). These land types are typical of arid and semi-arid regions with minimal vegetation. Agricultural uses composed of pastures (11% or 124,000 ha) and field crops (10% or 115,000 ha) support livestock grazing and crop production, highlighting the zone's reliance on agriculture for sustenance. Urban areas cover only a small fraction of the land (1%). Over 18,000 hectares in the zone can be classified as key biodiversity areas (KBAs).[11][11]

Key Elements of the System

The Irano-Turanian biogeographic zone of Jordan is a complex and interconnected ecological and socio-economic system that is significantly influenced by its unique biodiversity, which includes drought-resistant flora like juniper and pistachio trees, and resilient fauna such as migratory birds and small mammals. This biodiversity is vital for sustaining essential ecosystem services, such as soil fertility and water retention, which are crucial in mitigating broader environmental issues like climate change and soil degradation. Historically, the livelihoods of the region's people have revolved around grazing/pastoralism (Table 2), particularly goat and sheep farming, a fundamental economic activity and cultural identity for Bedouin communities, providing food security and a financial safety net.[12][12] However, a shift towards sedentary agricultural practices has altered the local economy, with smallholder farms focusing on subsistence crops like olives and grains and larger commercial farms emerging, often leading to resource strain, especially water. The socio-economic landscape is characterized by a blend of settled, semi-settled, and nomadic groups who have adapted to environmental challenges, yet now face intensified resource competition fueled by factors like refugee populations, which increases pressure on already scarce water, land, and grazing resources. With an average annual rainfall of just 150-300 mm, water availability is a critical constraint on agricultural productivity, exacerbated by climate variability that heightens demand from an expanding population. As traditional rain-fed agriculture becomes increasingly unsustainable, innovative water management methods like drip irrigation are implemented but often fall short.

Climatically, the region copes with high summer temperatures and erratic weather patterns, which threaten soil health through erosion and nutrient depletion, undermining agricultural productivity and grazing resources. The increasing frequency of extreme weather events linked to climate change contributes to economic instability and threatens food security, especially in rural areas. Coupled with persistent poverty and high unemployment – around 21.4%[13][13] - many people resort to unsustainable practices, such as overgrazing, to cope with their immediate economic needs. Due to the insufficient technical and financial support, the inefficacy of local governance in enforcing sustainable land management leads to further degradation, as overgrazing has caused a decline in rangeland productivity, severely impacting agriculture and livestock farming.[14][14] Furthermore, the region's traditional knowledge of sustainable practices is diminishing, as urbanization lures younger generations away from agriculture, eroding human capital necessary for effective rangeland stewardship and innovation in sustainable agriculture. With around 60% of the populace under 30 years of age and viewing agriculture as lacking economic promise, knowledge transfer is hampered, thus threatening the management and restoration of rangeland ecosystems. This loss of traditional practices, combined with worsening water scarcity due to climate change and erratic rainfall, results in declining pasture health, negatively impacting food security and perpetuating unsustainable coping strategies that deplete groundwater resources further, creating a vicious cycle of rangeland degradation and economic instability.

In Jordan, the term "local communities" is used as the appropriate umbrella term Indigenous Peoples and Local Communities (IPLCs), including rural and pastoral populations living in and using the rangeland and agricultural landscapes of the northern Badia. These communities include settled, semi-settled and mobile pastoral households, Bedouin pastoralists, smallholder farmers, community-based organizations, cooperatives and other local land users whose livelihoods and cultural practices are closely linked to rangelands

and natural resources. The term recognizes the important role of tribal and customary institutions, community leaders, traditional knowledge holders and pastoralist groups in regulating grazing, seasonal mobility, access to water and other natural resources, resolving local disputes, and maintaining rangeland stewardship practices. The use of the term “local communities” does not diminish the distinct rights, interests, knowledge systems or vulnerabilities of particular groups. Rather, it reflects the Jordanian national and institutional context while ensuring that stakeholder engagement and project implementation recognize the diversity of community interests and the role of customary institutions and traditional knowledge in sustainable land management. Local communities and traditional knowledge holders will therefore be treated as important stakeholders and rights-holders in project processes that may affect their livelihoods, resource access, cultural practices or customary arrangements. Their meaningful, inclusive and gender-responsive participation will be sought in land-use planning, rangeland restoration, sustainable grazing management, development of site-specific interventions, knowledge generation and monitoring, and the identification and implementation of measures to avoid or mitigate potential adverse impacts.

Underlying drivers: Threats and root causes of land degradation in the Irano-Turanian zone

As noted above, the Irano-Turanian zone is very vulnerable to environmental changes such as land degradation, desertification, water scarcity, and climate change. The production systems in the zone still face major global environmental challenges or threats, including the following:

1. Key to the zones's economic survival, unsustainable agricultural practices often lead to soil degradation through erosion, compaction, and salinization. Overgrazing and illegal cutting, driven by both economic necessity and cultural traditions, deplete soil nutrients, reducing agricultural productivity and accelerating land degradation.

2. With low and unpredictable precipitation levels, water scarcity is a profound concern. Over-extraction of groundwater has resulted in declining water tables, limiting availability for agricultural, domestic, and industrial use.

3. The impacts of climate change, characterized by shifts in temperature and rainfall patterns, pose significant threats to regional ecosystems and agriculture. Increased frequency of extreme weather events exacerbates desertification, where fertile lands are converted into arid landscapes.

4. The lack of verified and comprehensive data on land degradation significantly hampers efforts to understand the extent and causes of environmental issues in the zone. This gap limits stakeholders' ability to identify vulnerable areas and monitor the effects of land use practices, hindering the formulation of targeted interventions and effective policies.

5. There is a pervasive lack of knowledge regarding land cover and land use dynamics among local communities, policymakers, and land managers. This informational deficit leads to an underestimation of land use impacts on ecosystems and contributes to inadequate engagement in sustainable practices, further complicating land management efforts.

The above mentioned threats are mainly due to the following root causes:

- Economic pressures often compel farmers to adopt short-term approaches that maximize immediate yields, disregarding long-term solutions. The reliance on traditional farming methods, which may not incorporate modern sustainable practices, contributes to soil degradation. Additionally, inadequate access to education and resources related to sustainable agriculture hampers the adoption of better practices.

- The geographic and climatic characteristics of the Irano-Turanian zone result in low and variable precipitation, which is insufficient to meet the needs of its growing population. Moreover, over-extraction of groundwater is primarily driven by agricultural demands, as farmers seek to irrigate their crops amidst declining rainfall. Poor water management practices and the lack of efficient irrigation technologies further contribute to the crisis.

- Human activities, such as deforestation and unsustainable land management, contribute to increased greenhouse gas emissions, which in turn intensifies climate change. The degradation of land and vegetation reduces the landscape's resilience to climate-induced stress, accelerating the process of desertification..

- Insufficient investment in research and monitoring systems limits the availability of reliable data on land use, degradation, and ecological health. This financial neglect is often a consequence of competing governmental priorities and the scarce allocation of resources for environmental management. Additionally, the lack of coordination among various agencies and stakeholders leads to fragmented data collection efforts, resulting in incomplete or outdated information.

- Many local communities are unaware of the ecological consequences of their agricultural and land-use choices, partly because information is not effectively communicated or accessible. The limited availability of validated national datasets and monitoring systems leaves both policymakers and land managers without vital insights into land transformations.

The long-term solution is to facilitate a transformative shift from land degradation to improved decision making and sustainable land management. There are, however, several **barriers** that may prevent this solution to be implemented. These include:

a. **Barrier 1: Unverified national data on land degradation and climate change:**. A major challenge to enhancing climate resilience and making informed decisions on sustainable land management is lack of reliable data on land cover changes, soil health, and net primary productivity. This impedes the calibration of soil organic carbon content and the evaluation of ecosystem health, making it difficult to meet Land Degradation Neutrality (LDN) goals. This undermines the development of effective environmental policies, particularly in the ecologically sensitive Irano-Turanian zone.

b. **Barrier 2: Ineffective Land Use Planning and inadequate ground implementation and case studies on most vulnerable and sensitive areas:** A significant barrier to achieving effective restoration and sustainable land use in the Irano-Turanian zone is the insufficient integration of Environmental Decision Support Systems (EDSS) within land use and planning frameworks. This gap hinders the ability of policymakers, land managers, and local communities to make informed decisions essential for restoring degraded landscapes and preserving vital ecosystem services. The primary challenge lies in the limited access to comprehensive, reliable environmental data, which is crucial for building an effective EDSS. Current land use planning often relies on fragmented and outdated information, leading to decisions that do not align with the region's ecological realities. Furthermore, the absence of a holistic EDSS prevents meaningful stakeholder engagement, particularly with local communities whose knowledge and socio-economic context are crucial for successful restoration efforts.

c. **Barrier 3: Insufficient stakeholder participation in decision making:** Insufficient stakeholder awareness and limited access to vital information on sustainable land management (SLM) and land degradation neutrality (LDN). The lack of inclusion prevents the development of land management strategies that reflect the practical needs and realities of those directly affected. Furthermore, there is a notable gap in the integration of gender-inclusive approaches, as women, who play a crucial role in agriculture and resource management, are often sidelined in the dissemination of information and decision-making processes. Additionally, there is insufficient sharing of best practices and lessons learned from similar initiatives, both within Jordan and globally, leaving stakeholders without critical knowledge that could improve land management efforts.

d. **Barrier 4: Poor information dissemination and gender inequality**: Insufficient information sharing in the Irano-Turanian zone poses major obstacles to effective sustainable land management, with significant gender inequalities further exacerbating these challenges. This breakdown in communication limits the ability of stakeholders to access the latest tools, methodologies, and insights necessary for effective land management practices. Additionally, gender inequality remains a significant issue, as women, despite their essential roles in agriculture and resource management, are often excluded from decision-making and land management discussions due to cultural norms and systemic barriers. Cultural norms surrounding gender roles also limit women's ability to engage in open dialogues about sustainable land management, further constraining the potential for inclusive, holistic solutions.

Main Objective of the Proposed Project and its justification

The primary objective of the proposed project is to restore degraded rangelands and promote Land Degradation Neutrality in the northern Badia of Jordan through evidence-based land-use planning, sustainable management practices, and strengthened institutional capacity. This project is critical due to the alarming rate of land degradation in the Irano-Turanian zone, resulting in declining agricultural productivity, reduced water quality, and increased vulnerability to climate-related shocks. These negative trends threaten the sustainability of agricultural systems, exacerbating the vulnerability of local communities to climate change and undermining their food security. The absence of validated national default datasets hinders effective decision-making and planning for sustainable land management. As such, there is a critical need for an accurate and integrated LDN database that synthesizes scientific data, local insights, and best practices in sustainable land management. The project will develop an accurate, validated, and integrated LDN database, complemented by a comprehensive assessment of LDN and an integrated SLM framework, which will enable restoration interventions to target the most vulnerable and sensitive hotspots in the Irano-Turanian Zone with tailored restoration approaches. Deep involvement of local community participation will empower communities with the tools necessary to confront climate-related challenges while fostering adaptive capacity through sustainable agricultural practices that align with the ecological integrity of the Irano-Turanian Zone. Previous GEF-funded investments e.g. GEF ID 9407, have demonstrated the critical importance of community engagement and participatory approaches to sustainable land management. The project will be implemented in two districts of Sama Sarhan and Umm AlJemali in Mafraq governorate, as well the Surra rangeland reserve and Al-Khanasri rangeland reserve of the northern Badia.

Baseline Scenario and Baseline Projects

Currently, the Irano-Turanian bio-geographical zone in Jordan is grappling with significant challenges related to desertification and land degradation. Most of the Irano-Turanian zone experience moderate land degradation, particularly in the southern part. This region, characterized by its arid and semi-arid landscapes, is home to fragile ecosystems that face a multitude of issues primarily driven by both human activities and environmental factors. Overgrazing is a predominant concern, as the traditional reliance on pastoralism among local communities has severely depleted vegetation and compromised soil health. Livestock herding plays a pivotal role in the livelihoods of many residents, leading to unsustainable grazing practices that diminish the land's capacity to regenerate. In addition, urbanization and agricultural expansion have exacerbated the problem, with the encroachment of urban areas and intensive farming onto valuable rangelands resulting in habitat loss, ecological fragmentation, and reduced biodiversity. Compounding these challenges, climate change is increasingly affecting the Irano-Turanian zone, manifesting in more frequent and severe droughts that strain water resources and undermine agricultural productivity. The region's natural variability in climate already puts pressure on water availability, and changing weather patterns threaten to amplify these challenges, pushing already vulnerable communities further towards economic hardship. A critical gap in effectively addressing these issues is the absence of comprehensive, region-specific data to monitor and evaluate land use changes. Without up-to-date and validated information regarding the dynamics of land cover and degradation, decision-makers struggle to formulate targeted and effective policies and practices.

The proposed project aims to transform the landscape of the Irano-Turanian bio-geographical zone through a robust and systematic assessment of land use and cover changes by applying a landscape approch. The project will establish a solid foundation for understanding current land dynamics and identifying priority intervention areas. This structured approach will provide stakeholders with access to comprehensive and reliable information on land use changes, facilitating informed decision-making. The project aims to restore degraded rangelands, increase vegetation cover, and mitigate the impacts of desertification that threaten the delicate balance of this ecological region by promoting environmentally friendly practices, t. Engaging local communities will be at the heart of the project; by involving various stakeholders—including government agencies, NGOs, and residents—the project will employ a participatory approach to land management that values local knowledge and context. With a solid body of data and community involvement, the project can inform policy development geared toward effective land management in the unique ecological context of the Irano-Turanian zone

Should the proposed project not be realized, the implications for the Irano-Turanian bio-geographical zone will likely be grave. The ongoing issues of land degradation will continue unaddressed, leading to a deterioration of soil health, further reduction of vegetation cover, and an increase in erosion potential—thereby pushing the region closer to ecological collapse. The lack of accurate data will hinder the development of effective policies and practices, leaving stakeholders without the tools they need to manage the land sustainably. Without tailor-made, gender-inclusive restoration interventions implemented in the most vulnerable and sensitive areas, the biogeographical zone will face severe challenges related to land degradation, desertification, and declining land productivity. With increasing pressure on ecosystems, local populations will experience worsening poverty and food insecurity, heightening their vulnerability and reducing overall livelihood resilience.Without sustainable land management plan aimed at the unique features of the Irano-Turanian zone, the region's socio-economic fabric may unravel further, driving communities into a state of perpetual economic instability and ecological decline.

The proposed project targeting land degradation and sustainable land management in Jordan's Irano-Turanian zone aims to forge synergies with several ongoing and completed initiatives that align with its objectives. The United Nations Compensation Commission funded Badia Restoration Program (USD 140 million, 2006 – 2018) has laid a strong foundation for ecological restoration and community engagement, providing essential data on land degradation trends that will enhance the development of an integrated land degradation neutrality (LDN) database for the proposed project. Additionally, the Ministry of Agriculture led National Land Rehabilitation Program (2010 – 2020) emphasized sustainable rangeland management and community-driven solutions, offering critical insights into soil health assessment and land cover validation that will inform the proposed project's strategies. The GEF funded Healthy Ecosystems for Rangeland Development (HERD) Project (USD 15.7 million, 2018 – 2023), contributed adaptive management and resilience-building efforts that will enhance pilot restoration activities and local participation in land management. In addition, the Food Security and Livelihoods Analysis project, addressed the socio-economic impacts of the Syrian crisis since 2016, and will provide good baseline information for the development of gender-inclusive approaches within the proposed project. The GEF-IFAD funded Mainstreaming Sustainable Land Management Practices (IFAD-GEF) project (USD 39.6 million, 2018 – 2023) also promoted community-driven methodologies that will bolster stakeholder engagement strategies in the proposed project, while the FAO is currently supporting the Land Degradation Neutrality Process (USD 3.8 million, 2018 – 2026) provides lessons that will directly contribute to the establishment of frameworks for encouraging sustainable land use in the Irano-Turanian zone. Collectively, these initiatives not only strengthen the proposed project’s foundational assessments and participatory methods but also enhance its

potential for impactful interventions aimed at fostering ecological resilience and improving livelihoods within the arid regions of Jordan.

Stakeholder Engagement

The proposed project will engage multiple stakeholders, each playing a vital role in its successful design, preparation and implementation. The Ministry of Environment has been involved in theproject design and preparation and will be the project execution agency, providing technical guidance, regulatory oversight, and co-financing. It will chair the steering committee and coordinate the project's overall operations. The International Union for the Conservation of Nature (IUCN) has been involved in the design and preparation of this project, and, acting as the GEF Implementing Agency as well as co-executing agency with MoE, will offer technical and operational support through its regional office for West Asia (IUCN-ROWA) and will be a member of the steering committee. The Ministry of Planning and International Cooperation, as the GEF operational Focal Point, has been actively involved in the design and preparation of the project and will help align the project with national priorities while facilitating communication among stakeholders and endorsing project documentation to the Global Environment Facility (GEF). The Ministry of Agriculture has actively participated in the design and preparation of this project and will provide policy guidance, implement sustainable land management (SLM) activities, support in data validation land data, and promote gender-inclusive practices, also serving on the steering committee. Farmers, Ministry of local development (Municipalities) and local beneficiary groups will participate in SLM and restoration efforts and contribute to gender-responsive planning. Community-Based Organizations (CBOs) will act as intermediaries, offering training and promoting community engagement. The private sector will provide technical support and disseminate best practices, also contributing to the steering committee. Civil Society Organizations (CSOs) and NGOs will mobilize communities, ensuring inclusivity and transparency in decision-making. Finally, academic and research institutions will offer scientific research and data validation, ensuring evidence-based implementation. Key stakeholders will provide co-financing to support project activities.

The project will also recognize and appropriately integrate relevant traditional and experiential knowledge concerning rangeland management, grazing practices, seasonal mobility, drought coping strategies, water management and restoration of degraded landscapes. Such knowledge will be documented and used with the participation of the relevant knowledge holders, while respecting confidentiality and cultural considerations where applicable.

---

[1]Mohammad H. and Almarabeh T. (2009). E-government in Jordan. European Journal of Scientific Research 35(2): 88-197

[2]World Bank (2025). World Development Indicators Data Bank. Washington DC. https://databank.worldbank.org/reports.aspx?source=2&country=JOR

[3]World Bank (2025). World Development Indicators Data Bank. Washington DC. https://databank.worldbank.org/reports.aspx?source=2&country=JOR

[4]UNDP (2023). 2023 Global Multidimensional Poverty Index (MPI): Unstacking global poverty: Data for high impact action. United Nations Development Programme, New York. https://hdr.undp.org/content/2023-global-multidimensional-poverty-index-mpi

[5]Taifour, H., Dexter, K. G., Al-Bakri, J., Miller, A., & Neale, S. (2022). A State-of-the-Art Vegetation Map for Jordan: A New Tool for Conservation in a Biodiverse Country. Conservation, 2(1), 174-194. https://doi.org/10.3390/conservation2010012

[6] Palmer, C. (2013). Biogeography. In M. Ababsa (Ed.), Atlas of Jordan. Presses de l'Ifpo. https://doi.org/10.4000/books.ifpo.4871

[7] Palmer, C. (2013). Biogeography. In M. Ababsa (Ed.), Atlas of Jordan (1–). Presses de l'Ifpo. https://doi.org/10.4000/books.ifpo.4871

[8]Ministry of Environment (2022). Jordan's Fourth National Communication on Climate Change. Submitted to the United Nations Framework Convention on Climate Change (UNFCCC). Amman, Jordan.

[9] Palmer, C. (2013). Biogeography. In M. Ababsa (Ed.), *Atlas of Jordan* (1–). Presses de l'Ifpo. https://doi.org/10.4000/books.ifpo.4871

[10] Kurbatova A.I., Shatnawi N.N., Tarko A.M., Abu Qdais H.A., Grigorets E.A. (2025). Monitoring and assessment of vegetation covers of different biogeographical zones in Jordan using remote sensing and mathematical modelling,Kuwait Journal of Science. https://doi.org/10.1016/j.kjs.2025.100386

[11]Data from the Royal Geographic Centre of Jordan.

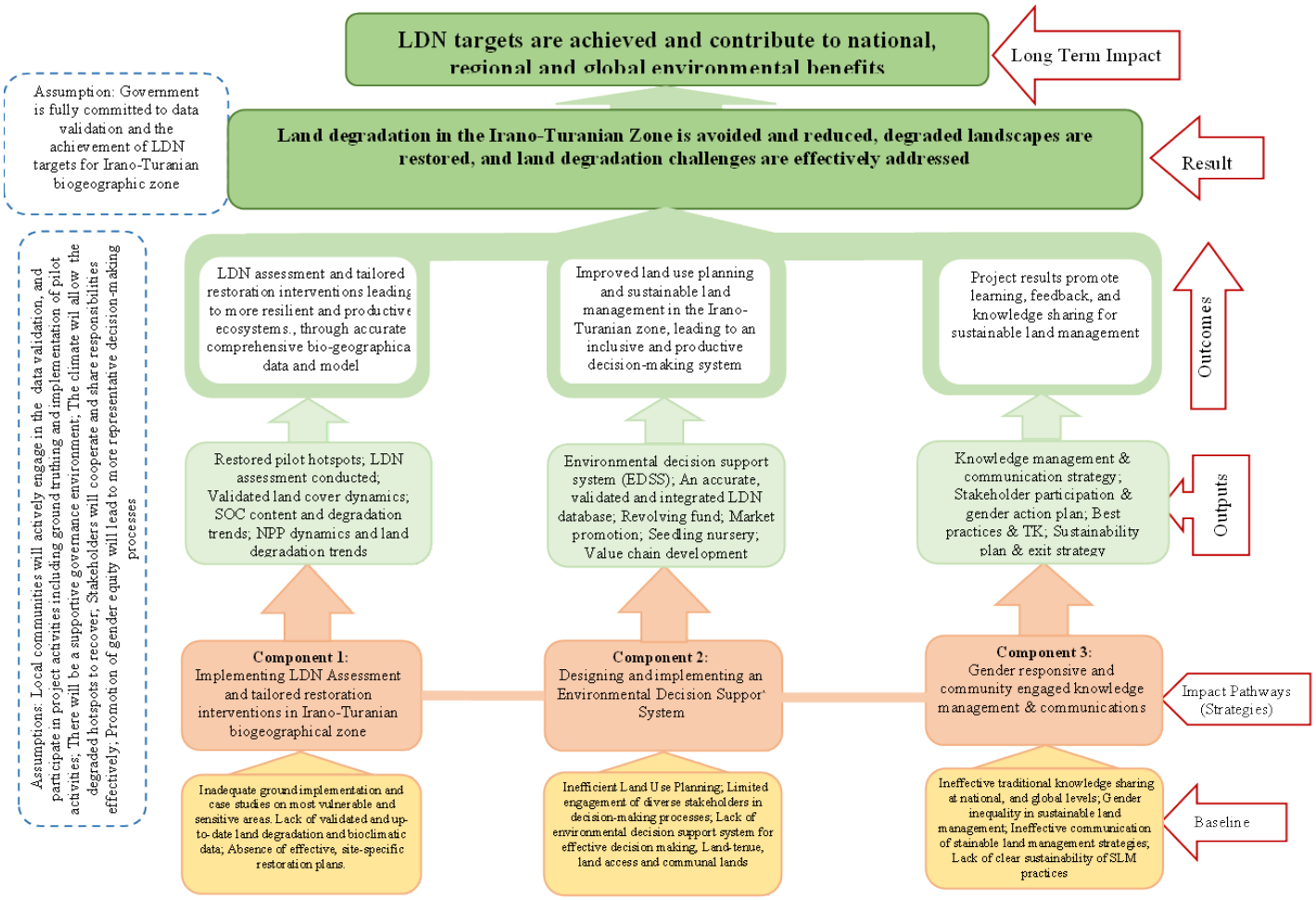
[12]Ministry of Environment (2015). National Strategy and Action Plan to Combat Desertification. Amman, Jordan.

[13]The Department of Statistics (2024). Press Release. Amman, Jordan. https://dosweb.dos.gov.jo/databank/news/unemployment/2024/unemp_Q1_2024_en.pdf

[14]Ministry of Environment (2015). National Strategy and Action Plan to Combat Desertification. Amman, Jordan.

B. PROJECT DESCRIPTION

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the guidance document. (Approximately 3-5 pages) see guidance here



Project Theory of Change

The Theory of Change (ToC) recognises that Land Degradation Neutrality in the Irano-Turanian zone of Jordan can be achieved if land use planning and decision-making are strengthened through the integration of reliable environmental data systems, effective governance and institutional coordination, and targeted sustainable land management interventions in priority degraded landscapes. The ToC recognises that current efforts to address land degradation are constrained by several interrelated barriers. These include: a) the lack of verified and integrated data on land degradation, b) weak and fragmented land use planning frameworks, c) limited implementation and scaling of sustainable land management practices in highly vulnerable ecosystems, d) insufficient stakeholder participation including gender inequities in decision-making processes, e) inadequate dissemination and use of environmental knowledge and decision-support tools, and f) limited access to sustainable financing mechanisms for land restoration and management. The ToC therefore posits that these barriers are fundamentally systemic in nature and require a transformation approach that goes beyond isolated technical interventions.

The ToC assumes that if high-quality, spatially explicit and integrated datasets on land cover dynamics, soil organic carbon, and climate variability are generated and made accessible, and if these are combined with predictive modelling tools and operational Environmental Decision Support Systems, then land use planning and natural resource management decisions will become increasingly evidence-based and responsive to ecological risks. This will enable the identification and prioritisation of the most vulnerable and degraded areas for targeted intervention, thereby improving the efficiency and effectiveness of restoration efforts and reducing the risk of further land degradation. At the same time, the ToC assumes that governance and institutional strengthening will be essential for sustaining these changes. If land governance systems are strengthened through improved institutional coordination, clearer mandates, and the integration of Land Degradation Neutrality targets into national and sub-national planning frameworks, then decision-making processes will become more coherent, accountable and aligned with sustainability objectives. Policy reforms that harmonise land use, environmental, and climate-related policies will reinforce this process by creating an enabling regulatory environment for sustainable land management practices and ensuring compliance and enforcement mechanisms are in place. The ToC also assumes that financial constraints are a major limiting factor in the adoption of sustainable land management practices. Therefore, if innovative financing mechanisms such as community-based revolving funds and value chain development for sustainable rangeland products are introduced and strengthened, then incentives for local actors to adopt and maintain restoration and sustainable land use practices will increase. This financial lever is expected to shift investment patterns from short-term, unsustainable land use practices towards long-term restoration and resilience-building activities. The ToC assumes that knowledge systems and information flows are critical enablers of behavioural and institutional change. If Environmental Decision Support Systems are institutionalised and integrated with validated land degradation neutrality datasets and if knowledge-sharing platforms and capacity-building processes are strengthened, then stakeholders at all levels, including government institutions, local communities, and private sector actors, will be better equipped to make informed decisions and adopt sustainable practices. This will be reinforced through inclusive and gender-responsive participation mechanisms that ensure that women and marginalised groups are actively engaged in planning, implementation and benefit-sharing processes, thereby improving equity and social sustainability outcomes.

These interventions are structured into three mutually reinforcing implementation pathways. The first pathway focuses on the development of integrated land degradation neutrality data systems and predictive modelling tools that support evidence-based planning and prioritisation of interventions. The second pathway focuses on the implementation of sustainable land use management frameworks and targeted restoration measures in the most vulnerable and degraded sites within the Irano-Turanian zone, thereby directly addressing ecological degradation.

The third pathway emphasises gender-responsive and community-engaged knowledge management and communication systems that strengthen participation, ownership and behavioural change at local level. Through the interaction of these pathways and transformation levers described above, the project will generate a series of interlinked outcomes. These include: a) the availability and institutionalisation of reliable and validated land degradation neutrality datasets, b) the operational use of Environmental Decision Support Systems across planning and management institutions, c) the adoption of sustainable land management practices in degraded and vulnerable landscapes, d) the strengthening of integrated and coherent land use planning frameworks that incorporate environmental, social and economic considerations, the restoration and protection of degraded ecosystems, and e) the enhanced participation of stakeholders including women and local communities in land governance processes. These outcomes are expected to reinforce one another through feedback loops, where improved data systems inform better planning, improved governance enables better implementation, and enhanced financing and knowledge systems sustain long-term behavioural and institutional change. If these outcomes are achieved and sustained, the project will contribute to long-term transformational change in the Irano-Turanian zone. These changes are intended to generate both national and global environmental benefits.

The ToC is based on several key assumptions and risks. It assumes that reliable environmental and socio-economic data can be generated, maintained and institutionalised; that stakeholders at all levels will actively engage in and support participatory planning and implementation processes; that there will be sustained political commitment to Land Degradation Neutrality objectives; that decision-support tools such as Environmental Decision Support Systems will be adopted and effectively used by relevant institutions; that financial mechanisms for sustainable land management will remain accessible and functional; and that capacity-building efforts will lead to sustained behavioural and institutional change beyond the life of the project. The ToC also recognises several key risks and outlines mitigation measures to address them. These include the risk of weak institutional uptake of decision-support tools, which will be mitigated through targeted capacity building and institutional embedding of systems; the risk of limited stakeholder ownership, which will be addressed through continuous participatory engagement and inclusive governance mechanisms; the risk of policy misalignment or weak enforcement, which will be mitigated through policy integration and harmonisation efforts; and the risk of inadequate financing for scaling sustainable land management, which will be addressed through diversified financing mechanisms and leveraging of co-financing opportunities. Through these measures, the project will ensure that the changes achieved is sustainable, scalable and capable of delivering long-term environmental and socio-economic benefits.

The project will be implemented through three interrelated components, each contributing to the overarching goal of addressing land degradation and enhancing climate resilience in the Irano-Turanian zone of Jordan. The project components are mutually reinforcing and are designed to translate technical assessments and institutional strengthening into measurable improvements on the ground. Under Component 1, GIS-based land degradation assessment, hotspot identification and ground validation will generate spatially explicit evidence that enables restoration resources to be directed to the most degraded and environmentally sensitive areas; this will result in targeted restoration and measurable improvements in vegetation cover, soil condition and land productivity. Under Component 2, the validated spatial and bioclimatic data will be integrated into the LDN/SLM database, land-use planning framework and Environmental Decision Support System (EDSS), enabling government institutions and land users to make evidence-based land-use and SLM decisions. Market studies and value-chain support under Component 2 will identify viable economic opportunities for sustainable rangeland products and connect communities to markets and financing mechanisms, thereby creating incentives for continued adoption of SLM practices. Component 3 will strengthen community participation, gender-responsive knowledge management, capacity building and dissemination of good practices, enabling local institutions and communities to apply, maintain and replicate restoration and SLM practices. Together, these outputs will strengthen governance, improve land management practices, restore degraded areas, increase community ownership and generate the environmental and livelihood benefits required to contribute to LDN and the project's global environmental benefits.

The three project components are described below:

Component 1. Implementing LDN Assessment and tailored restoration interventions in Irano-Turanian biogeographical zone.

The component will utilize scientific evidence to conduct an assessment using multicriteria analysis, cost-benefit analysis, and hotspot analysis in the Irano-Turanian zone to identify the most vulnerable and sensitive hotspots that require prompt interventions. It will then design and implement gender-inclusive restoration interventions, involving local community participation, in these identified hotspots, leading to more resilient and productive ecosystems. These interventions will employ nature-based solutions, such as restoration and rehabilitation , erosion control, and soil and water conservation, in collaboration with local communities. The project will prioritize enhancing management effectiveness in key protected areas, notably the Surra rangeland reserve (387.7 ha) – which hosts grazing stations, applied scientific trials, and a veterinary quarantine facility, Al-Khanasri rangeland reserve (343.3 ha) – which hosts a national research station focused on rangeland ecology and management, therefore, targeted interventions such as capacity building, participatory monitoring, and community engagement will be implemented over 731 hectares of the above mentioned rangeland reserves to strengthen the reserve's management, ensuring it can serve as a model for sustainable protected area governance and contribute to the overall goal of improving land management effectiveness in Jordan. Up to 750 hectares of degraded rangeland will be restored through the re-establishment of native pastoral vegetation, including the planting of native grasses, shrubs, and trees, alongside the development of a native species to support long-term regeneration. The proposed intervention areas within the Irano–Turanian zone will be reassessed using updated land-use data and field validation to ensure they correspond to actual rangeland areas and exclude non-rangeland uses. Sustainable land management practices (SLM) such as crop-rotation, conservation tillage, water harvesting techniques, organic fertilizer and agroforestry will be applied over approximately 500 ha within the Irani-Tuorani biogeographical zone On an area of 18,000 hectares of key biodiversity areas (KBAs), sustainable land management activities will be implemented, aiming to improve habitats, raise awareness, and enhance community outreach.

Outcome 1.1 LDN assessment and restoration interventions driven by accurate, comprehensive, and accessible bio-geographical data and models

The foundation for Land Degradation Neutrality (LDN) in the Northern Badia will be strengthened by generating accurate, comprehensive, and accessible biogeographical data to guide evidence-based restoration and sustainable land management. This will be done through an integrated approach combining satellite analysis, field-based assessments, and participatory methods. The project will therefore identify and validate the most vulnerable and sensitive degradation hotspots across 750 hectares of the northern Badia. High-resolution land cover maps, detailed soil and vegetation datasets, and household-level socio-economic insights will be developed and form the core of a robust information system to show degradation patterns and drivers with high accuracy. Building on this data, multi-criteria and cost-benefit analyses will be prioritized to identify hotspots within an area of 750 hectares of degraded rangelands. In addition, the project will also strengthen long-term monitoring capacity through the validation of land cover dynamics, soil organic carbon (SOC), and net primary productivity (NPP) trends, integrating ground-truth data with Sentinel-2 remote sensing. National staff will be trained in GIS, remote sensing, and environmental modelling for sustained national capacity to maintain, update, and apply these datasets.

Output 1.1.1. Land Degradation Neutrality in the Irano-Turanian assessed and the most vulnerable and sensitive hotspots in the Irano-Turanian Zone identified with multicriteria analysis, cost/benefit analysis, and hotspot analysis.

Through the integration of satellite analytics, participatory field surveys, and multi-criteria and cost–benefit modelling, accurate, spatially explicit evidence will be generated to guide restoration and sustainable land management interventions.

Activity 1.1.1.1. Conduct satellite data analysis (Sentinel-2, MODIS, Landsat)

Satellite-based remote sensing analysis will be performed to identify vulnerable and sensitive hotspots of northern Badia. Multispectral imagery will be acquired from three primary sources: Sentinel-2 (10 m resolution) for high-resolution mapping, MODIS (250 m resolution) for continuous temporal monitoring, and Landsat-8/9 (30 m resolution) for historical trend analysis. The satellite images will undergo pre-processing steps, including radiometric and atmospheric corrections, cloud masking, geometric correction, and mosaicking, ensuring spatial consistency across the project area. The pre-processed images will be imported into GIS software (such as ArcGIS or QGIS) for further analysis. The combination of these datasets will allow the integration of both high spatial and temporal resolution, enabling accurate detection of subtle landscape changes over time. Land cover classification, employing supervised and unsupervised techniques, such as Random Forest and Maximum Likelihood classifiers, will be validated against known ground points from historical datasets. Vegetation indices such as Normalized Difference Vegetation Index (NDVI) and Enhanced Vegetation Index (EVI) will be calculated to assess vegetation health and stress levels. Soil degradation will be inferred through combinations of the Soil Adjusted Vegetation Index (SAVI) and bare soil fractions, while erosion-prone areas will be mapped using terrain and slope information derived from Digital Elevation Models (DEMs). The satellite-derived land cover and vegetation stress maps will be supplemented by GIS layers of hydrology, roads, settlements, and administrative boundaries, facilitating spatial integration with other project datasets. Spatial overlays will be done to identify hotspots based on sensitivity, land degradation risk, and potential for restoration. In addition, time-series analysis of vegetation trends, providing critical evidence of historical degradation, will be conducted to guide intervention planning in restoration activities.

Activity 1.1.1.2. Carry out participatory ground surveys

Field-based data collection (land cover, soil condition, vegetation types, and land use practices) will be conducted across the 750-ha project area to provide robust ground truth points to validate and refine satellite-derived points. Using participatory rural appraisal (PRA) alongside with PRAGA (Participatory Rangelands and Grasslands Assessment) and PRMPs (Participatory Rangelands Management and Plannings) tools and systematic field sampling, sites that will be representative of different ecosystems, land uses and degradation intensities will be selected to represent different land cover categories identified in satellite images, including rangelands, agricultural plots, and degraded hotspots. To make sure the survey adequately captures variability in landscape condition while promoting community engagement and ownership, priority will be given to areas identified as potentially vulnerable or sensitive in the preliminary satellite analysis. Soil samples will be collected for laboratory analysis of organic carbon, bulk density, and moisture retention, while vegetation assessments will record species composition, cover density, and regeneration potential. Data collected from field surveys will be systematically cleaned, coded, and uploaded to a centralized GIS database. At each selected site, GPS handheld devices will be used to record the geographic coordinates of observation points. A minimum of 250 GPS points will be collected to achieve robust spatial validation of satellite-derived maps. Soil samples will be taken at each point using standardized soil augers, collecting a total of at least 300 samples to allow for soil organic carbon (SOC), pH, texture. Vegetation surveys will be conducted using quadrat methods (1 m^2 to 10 m^2 depending on vegetation type) to record species composition, cover, density, and signs of degradation such as erosion, overgrazing, or invasive species. Digital photographs and field notes will document the condition of the landscape, and mobile data collection platforms like KoboToolbox will be used to record survey data in real time, ensuring accuracy and efficiency in data capture. GPS points will be overlaid with satellite-derived maps to assess classification accuracy, with discrepancies analyzed to refine land cover classifications. Soil and vegetation sample analyses will feed into models for soil fertility, carbon stocks, and vegetation productivity, which are critical for subsequent SOC and NPP trend validation. Household interviews and focus group discussions (FGDs) will also be conducted with at least 200 households across the project area. These discussions will gather qualitative information on land use history, grazing practices, fire management, crop cultivation, water availability, and community perceptions of land degradation. Particular attention will be given to gender and youth inclusion, ensuring that women's and young people's perspectives are integrated into the assessment of vulnerable hotspots. For example, local herders, farmers, and community leaders will be engaged through focus group discussions and transect walks to identify historically degraded areas, drivers of degradation, and community priorities for restoration. Participatory mapping exercises will allow communities to identify areas of high ecological, cultural, or economic value, providing crucial local context to complement biophysical data.

Activity 1.1.1.3. Run multicriteria and cost-benefit analysis

This activity will integrate the remote sensing datasets and ground-truthing results into a structured multicriteria decision analysis (MCDA) to identify the most vulnerable and sensitive hotspots for restoration. The objective will be to prioritize areas for restoration interventions based on ecological vulnerability, socio-economic value, and feasibility of sustainable land management (SLM) practices. MCDA will enable the ranking of potential restoration sites by assigning weights to multiple criteria, reflecting both ecological and socio-economic priorities. All spatial and non-spatial datasets from prior activities above, including satellite-derived

land cover maps, NDVI/EVI indices, vegetation composition and vegetation cover degradation, and field-verified GPS points, socio-economic datasets such as land tenure, grazing intensity, crop productivity, water accessibility, soil properties and community perceptions of degradation soil erosion risk, water scarcity, biodiversity importance, community dependency on ecosystem services, and gender-sensitive land use practices, will be compiled into a database. All the various variables will be standardized by being assigned weighted values to enable compatibility across different scales and formats. The weights will be determined through stakeholder consultations, ensuring that local priorities and gender considerations are explicitly integrated. Using GIS platforms, these criteria will be overlaid and spatially analyzed to generate a preliminary vulnerability index map of the project area. The MCDA will be complemented by cost-benefit analyses (CBA) of different restoration options (e.g., reforestation, erosion control, water harvesting, agroforestry). This dual approach balances ecological priorities with economic feasibility and community needs. Costs such as nursery establishment, seedling propagation or reseeding and water harvesting infrastructure will be considered in the analysis. Benefits will be quantified in terms of ecosystem services, including soil carbon sequestration, water regulation, forage availability, biodiversity conservation, and potential agricultural yield improvements. Non-market benefits, such as cultural and recreational values, will be estimated using ecosystem valuation approaches and community input. This will allow both tangible and intangible benefits to be incorporated in the analysis. The combined MCDA and CBA process will result in a set of prioritized hotspot maps. Approximately ten high-priority hotspots will be identified where ecological vulnerability is high and the potential benefits of restoration exceed implementation costs. Each map will be accompanied by a detailed report that will document the underlying assumptions, criteria weights, economic valuations, and proposed interventions. Sensitivity analyses will be conducted to examine how changes in assumptions will affect hotspot ranking, thereby ensuring the robustness of the recommendations.

Activity 1.1.1.4. Validate findings with stakeholders and Ministry of Environment

The hotspot maps and analysis will be validated through structured consultations with stakeholders at community, governorate, and national levels. Validation is essential to align scientific assessments with local knowledge, gender considerations, and policy frameworks. The validation process will include at least one workshop with local communities (ensuring ≥40% participation by women), technical meetings with line ministries (such as Environment, Agriculture, Water and Local Development), and dialogue with civil society and academic institutions. Each workshop or meeting will be structured in multiple stages: a presentation of findings, interactive map review, group discussions, and feedback collection. High-resolution hotspot maps (1:25,000 to 1:50,000), digital GIS layers, ecosystem service valuation reports, cost-benefit summaries, and narrative explanations of the MCDA criteria and weighting will be developed and presented to stakeholders for interactive feedback. Participants will provide feedback on ecological plausibility, social acceptability, land use practices, erosion patterns, grazing pressure, and culturally significant sites, and feasibility of proposed restoration interventions. Special attention will be given to ensuring gender-inclusive participation, with targeted sessions for women and youth to voice perspectives on restoration priorities, labor allocation, and benefits sharing. The Ministry of Environment, as the executing agency and UNCCD-Focal point, will formally endorse the hotspot identification report, ensuring its integration into national land use planning frameworks and UNCCD LDN reporting.

Output 1.1.2. Tailor-Made gender inclusive community-led restoration interventions involving local community participation implemented in the most vulnerable and sensitive hotspots in the Irano-Turanian Zone

The results from hotspot assessment will require to be translated into concrete, community-led and gender-inclusive restoration across the most vulnerable areas of the northern Badia. Through participatory processes, the project will therefore co-design and implement restoration interventions that combine ecological restoration, climate-smart rangeland rehabilitation, and sustainable land management (SLM) practices.

Activity 1.1.2.1: Develop site-specific restoration plans with community input

This activity will focus on designing detailed, context-specific restoration plans for each identified hotspot, building on the outputs of the multicriteria, cost-benefit, and hotspot analyses (Output 1.1.1). The process will begin with consultative planning workshops in the northern Badia, bringing together local community members, including women, youth and pastoralists, alongside technical experts from the Ministry of Environment, local municipalities, Ministry of Agriculture, and NGOs and other relevant stakeholders. This will make restoration interventions not only ecologically sound but also socially acceptable, economically feasible, and aligned with community priorities. The development of the restoration plans will combine scientific analysis and participatory rural appraisal (PRA) tools to co-create actionable plans for five restoration sites, each approximately 150 hectares, collectively targeting at least 750 hectares of degraded rangelands. All the validated hotspot maps, land cover data, soil degradation analyses, and ecosystem service

assessments will be collated and reviewed. This will provide the baseline for site-specific planning and help to identify areas requiring different types of interventions such as re-seeding, erosion control, water harvesting, or agroforestry integration. Restoration objectives will be defined clearly for each site, emphasizing sustainable land management (SLM), carbon sequestration, biodiversity enhancement, and climate resilience. Gender inclusion will be central, with separate focus groups organized for women and youth so that their voices are explicitly captured. Plans will also embed climate resilience measures, recognizing the high vulnerability of thenorthern Badia to drought and degradation. GIS layers generated from the earlier will be used to delineate micro-sites and identify restoration priorities at the hectare level. Plans will incorporate monitoring and evaluation frameworks, specifying key indicators for survival rates, soil organic carbon improvements, and vegetation cover changes. These indicators will be aligned with broader LDN targets to allow tracking of ecological outcomes. Each plan will be validated through joint review meetings with government institutions and community leaders before implementation begins.

Activity 1.1.2.2: Acquire Germplasm from Independent Seedling Providers

The seedlings of native species will provide the biological foundation for restoration interventions in northern Badia. This activity will involve procurement of seedlings from partner organisations or community-managed nurseries in strategic locations near each identified hotspot, ensuring easy access to planting material or coordinate with Ministry of Agriculture. This will directly support the target of restoring 750 hectares of degraded land while promoting biodiversity, climate resilience, and sustainable livelihoods. Suitable nursery owners (Ministry of Agriculture, partner organisations or communities) will be identified to supply the required seedlings or seed. Native species will be used based on ecological suitability, resilience to local climatic conditions, and traditional uses. The suppliers will be required to provide clean and treated seed, with a possibility of storage in dedicated seed banks under controlled conditions to maintain viability. The germplaasm (seedlings/seed) supply will provide approximately 20,000 seedlings to meet planting requirements. The seeds will be sourced from healthy mother plants within and around northern Badia, ensuring quality and genetic integrity.

Activity 1.1.2.3: Implement Rangeland Restoration Interventions

Active and passive restoration across 750 hectares of degraded landscapes in the northern Badia will then be implemented to rehabilitate rangelands, enhance ecosystem functionality, and promote sustainable land use while incorporating local knowledge and stakeholder participation. The overarching goal is to establish resilient vegetation cover, promote soil fertility, improve biodiversity, and support sustainable livelihoods. The restoration process will begin with site selection, detailed planning, and baseline biophysical assessments. This will include baseline surveys establish the current condition of vegetation, soil quality, hydrology, and erosion patterns. These assessments will inform the design of restoration interventions, ensuring site-specific strategies that optimize ecological success. Intervention areas will exclude privately owned, agricultural, and mixed-use lands where restoration is not feasible, unless clear agreements and suitability are established. Land-use screening criteria will be applied to ensure only appropriate rangeland areas are selected. Site selection will incorporate land tenure analysis, including ownership status (public, private, communal), official land classification, access rights, verified on-the-ground land use and potential conflicts. Only areas with clear and agreed land-use and tenure arrangements will be prioritized for intervention. Where initially proposed sites are found unsuitable, alternative restoration areas will be identified and prioritized using the same multi-criteria and participatory approach. Participatory approaches will be employed, including engaging local communities, women's groups, and youth, to incorporate traditional ecological knowledge, identify local priorities, and foster ownership of the restoration process. Erosion control and water-harvesting structures will be installed. These will include check dams, infiltration pits, micro-catchments, and contour trenches to prevent soil loss, improve water retention, and enhance seedling survival. The structures will be designed using local labor, training, and materials to promote sustainability and community involvement. Soil fertility enhancement techniques, including organic amendments and mulching, will integrate alongside these structures to accelerate vegetation establishment. At least 20,000 drought-tolerant native trees and shrubs will be planted, complemented by reseeding of native grasses and forbs. Assisted Natural Regeneration (ANR) techniques involving protecting naturally regenerating species, clearing invasive weeds, and implementing micro-site management for optimal growth conditions will also be implemented as part of the restoration interventions.

Activity 1.1.2.4: Implement Sustainable Land Management (SLM) Interventions

Sustainable Land Management (SLM) interventions will be implemented across 500 hectares of managed lands to improve soil health, water retention, and vegetation productivity, while enhancing community resilience and adaptive capacity. This will integrate structural, vegetative, and agronomic measures, combining scientific best practices with participatory approaches to promote local ownership, gender inclusivity, and long-term sustainability. Participatory land-use mapping and baseline assessments will be

conducted. Local communities, including women's groups and youth, will be engaged to identify priority areas, existing land-use patterns, soil degradation hotspots, and water scarcity challenges. In addition, baseline data on soil fertility, erosion levels, and vegetation cover will be used to provide essential inputs for designing context-specific SLM interventions. Structural SLM measures will then be implemented to control erosion and improve water availability. These measures include terraces, infiltration pits, and check dams constructed using local labor and materials. Agroforestry systems, contour farming, and fodder banks will be introduced to enhance soil stability, biodiversity, and community livelihoods. These interventions will be designed to reduce land degradation, conserve soil moisture, and provide sustainable sources of fuelwood, fodder, and other ecosystem services. Agronomic and vegetative interventions will also be implemented to restore and maintain soil fertility. Practices such as crop rotation, intercropping, mulching, and organic amendments will be introduced to enhance soil productivity and reduce nutrient depletion. Vegetative cover will be strengthened through planting native shrubs, grasses, and trees adapted to local climatic and soil conditions.

Activity 1.1.2.5: Train local communities (including women and youth) on restoration practices

Under this activity, the capacities of local communities, with a focus on women and youth, will be strengthened to effectively engage in land restoration and sustainable land management (SLM). Emphasis will be placed on participatory learning, practical skills development, and gender-inclusive approaches to promote equitable access to knowledge, tools, and decision-making processes. Initially, a comprehensive needs assessment will be conducted to identify specific skill gaps, knowledge priorities, and local constraints affecting community participation in restoration and SLM activities. Special attention will be given to understanding the roles of women and youth in land-use practices, decision-making, and natural resource management. Training materials and manuals will then be developed, integrating theoretical knowledge with hands-on practical exercises. These materials will cover topics such as nursery management, tree and shrub propagation, assisted natural regeneration (ANR), soil and water conservation, agroforestry techniques, erosion control, and post-planting maintenance. Gender-sensitive modules enable women and youth to actively contribute to and benefit from training outcomes. The training will then be conducted through a series of participatory sessions, targeting approximately 250 participants, with at least 40% women and 30% youth. Field demonstrations will be conducted to reinforce practical skills, enabling participants to directly engage with restoration activities, SLM interventions, and agroforestry practices. These sessions will also provide opportunities to test locally adapted techniques, encourage innovation, and integrate indigenous knowledge with scientific approaches.

Output 1.1.3. Land cover dynamics, soil organic carbon content, and Net Primary Productivity (NPP) Dynamics validated in support of achieving land degradation neutrality (LDN) objectives in the Irano-Turanian Zone for sustainable land management

Under this output, the scientific basis for monitoring land degradation neutrality (LDN) will be strengthened by validating land cover change, soil organic carbon (SOC) content, and Net Primary Productivity (NPP) dynamics across the northern Badia. These datasets are essential for understanding long-term ecosystem trends and ensuring that restoration efforts are aligned with national LDN targets.

Activity 1.1.3.1: Collect Ground-Truth Data with GPS and Soil Sampling

The purpose of this activity is to collect accurate ground-based data to validate remote sensing outputs and support the reliability of land cover, soil organic carbon (SOC), and vegetation assessments. Ground-truthing is critical for enhancing the accuracy of satellite-derived land degradation and restoration maps and for informing subsequent modelling, predictive analyses, and monitoring of ecosystem services within the northern Badia. Field teams composed of trained national researchers, extension officers, and local community members (with at least 40% women and youth) will use GPS handheld devices to geo-reference land cover types, vegetation structure, and soil characteristics. A total of 250 GPS points and 200 soil samples will be collected from designated plots. Stratified random sampling will be applied across the 750 ha of identified hotspots to achieve coverage of diverse ecological units, including rangelands, cultivated fields, and degraded patches. Soil samples will be collected at varying depths (e.g., 0–30 cm, 30–60 cm) to measure organic carbon, moisture content, and texture, providing a robust dataset to calibrate satellite-derived indicators. Local community guides will be engaged in transect walks and participatory mapping to confirm land use histories and validate observed cover types, ensuring that indigenous knowledge informs scientific categorization. Data collection will be synchronized with Sentinel-2 satellite overpasses to minimize discrepancies in temporal resolution. This ground-truthing is critical because unverified satellite data often lead to biased LDN assessments and weak policy responses. The project will generate more accurate baseline measurements of land cover and soil conditions by triangulating satellite imagery with field data and local knowledge, providing a solid foundation for designing evidence-based restoration interventions and monitoring progress toward LDN.

Activity 1.1.3.2: Analyze SOC in Labs and Calibrate with Remote Sensing

The main objective of this activity is to quantify soil organic carbon (SOC) levels from field-collected samples and integrate these measurements with remote sensing data to produce accurate, spatially explicit SOC maps for monitoring land degradation and restoration progress. SOC is a critical indicator of soil health, fertility, and land productivity; precise measurements are essential for informing land degradation neutrality (LDN) assessments, targeted restoration interventions, and sustainable land management (SLM) strategies. Soil samples collected during ground-truthing (≥300 samples) will first be air-dried and passed through sieves to remove coarse materials. Samples will then be homogenized and weighed precisely before laboratory analysis. Samples will then be analysed for soil organic carbon (SOC), . Results will then be statistically calibrated with spectral reflectance data obtained from Sentinel-2, MODIS and Landsat imagery, leveraging vegetation indices e.g., Normalized Difference Vegetation Index (NDVI), Soil Adjusted Vegetation Index (SAVI) and Enhanced Vegetation Index (EVI). Machine learning algorithms such as Random Forest and Gradient Boosting will be employed to model the relationship between field-measured SOC and satellite-derived predictors. This process will produce continuous SOC maps across northern Badia with improved accuracy. Cross-validation techniques will be used to minimize errors and strengthen robustness. The project will create time-series SOC trends that reveal patterns of degradation and recovery by integrating ground data with remote sensing. These trends will be essential for identifying areas with declining carbon stocks, which are often the most vulnerable to desertification. This activity will therefore: (1) generate high-quality, spatially explicit SOC data that surpasses the limitations of global datasets, which are often coarse and outdated; and (2) enable national institutions to build a predictive capacity for monitoring land degradation. The activity also has climate benefits, since SOC levels are directly linked to carbon sequestration potential. This evidence base will allow Jordan to report more accurately on UNCCD LDN targets and contribute to global carbon accounting.

Activity 1.1.3.3: Assess NPP Trends with Satellite Vegetation Indices

Net Primary Productivity (NPP) will be assessed using multi-temporal satellite imagery to capture vegetation dynamics and land productivity trends across the northern Badia. NPP represents the net carbon uptake by vegetation and is a critical ecological indicator for land degradation and restoration assessment, particularly under Land Degradation Neutrality (LDN) frameworks. The project will rely on MODIS (250m resolution, 16-day composites) and Sentinel-2 (10m resolution) datasets, applying vegetation indices such as NDVI, EVI, and GPP (Gross Primary Productivity) proxies to track seasonal and annual variations in biomass production. The use of both coarse-resolution MODIS and fine-resolution Sentinel-2 imagery allows accurate trend analysis at landscape and local scales, capturing both broad and site-specific vegetation dynamics. NDVI provides information on green biomass and chlorophyll activity, while EVI improves sensitivity in high-biomass areas and minimizes atmospheric and canopy background noise. These indices will be extracted over the entire project area, with time series generated to monitor seasonal and annual variations. Analytical models will integrate climate variables (precipitation, temperature, evapotranspiration) with vegetation indices to disentangle human-driven degradation from natural climatic variability. To improve accuracy, remote sensing data are calibrated with field measurements from permanent sample plots established during ground surveys. Therefore, field data collected under Activity 1.1.3.1 will serve as reference points to validate NPP estimates. Statistical models, including regression and machine learning algorithms, are applied to translate spectral indices into quantitative estimates of biomass accumulation and carbon fixation. Trend analysis will cover different land use categories (rangelands, cultivated land, forest patches, degraded hotspots) to highlight areas of declining, stable, or increasing NPP, which are linked to land use changes, restoration interventions, climatic variability, and degradation pressures. Spatial trend maps will be generated, indicating areas where interventions such as agroforestry, water harvesting, or soil conservation have led to measurable productivity gains. NPP assessments will be integrated into the project's GIS-based SLM and LDN database, linking productivity trends with soil organic carbon, land cover, and restoration activities. This integrated approach will allow for holistic ecosystem monitoring, supporting decision-making through the Environmental Decision Support System (EDSS) and guiding future restoration planning. This activity is critical because NPP serves as a proxy for ecosystem health and resilience, directly linked to food security, livestock carrying capacity, and community livelihoods. The project will prioritize emergency restoration measures and prevent further ecological collapse by identifying areas of declining NPP. Conversely, areas with rising NPP due to project interventions will demonstrate proof of concept, building momentum for scaling up SLM practices.

Activity 1.1.3.4: Train National Staff in GIS/RS and Modelling

The national capacity in geospatial technologies, remote sensing (RS), and environmental modelling will be built to enable sustainable land management, landscape restoration monitoring, and data-driven decision-making across the Northern Badia project area. At least 25 national staff, including a minimum of 40% women, will be trained to promote inclusivity and develop a technically skilled workforce capable of supporting both current project activities and long-term land degradation neutrality (LDN) monitoring objectives. A comprehensive needs assessment will be conducted identifying knowledge gaps, technical requirements, and priority

competencies in GIS, RS, and modelling. This assessment will inform the development of a tailored training programme, designed to equip participants with both theoretical understanding and practical skills relevant to vegetation monitoring, soil carbon mapping, and spatial analysis of restoration outcomes. Training delivery will combine classroom-based instruction with hands-on exercises using project-derived data. Participants will be trained in remote sensing image pre-processing, calculation of vegetation indices (NDVI, EVI), integration of field-collected ground-truth data, and spatial modelling techniques for assessing net primary productivity (NPP), soil organic carbon (SOC), and restoration success. Special emphasis will be placed on using open-source and cost-effective geospatial software to promote sustainability and replicability. Participants will learn to generate maps, conduct temporal trend analyses, and interpret modelling results to inform restoration interventions, sustainable land management (SLM) planning, and adaptive management strategies. The training will also emphasize the use of spatial outputs for reporting to stakeholders, policy-makers, and international partners, fostering transparency and evidence-based governance.

Component 2: Designing and Implementing a Sustainable Land Use Management Framework and Environmental Decision Support System

This component will enhance land use planning and promote sustainable land management in the Irano-Turanian zone, leading to a gender responsive and highly engaged community resilience decision-making system. This will be achieved through the development of a responsive land use framework derived from the recently approved land use system. The framework can guide and actively promote the participation of women and local communities such as Bedouins in land use decision making in a sustainable manner. The project will create a sustainable land use planning framework that incorporates climate resilience, biodiversity conservation, and socio-economic benefits, with specific efforts to integrate women's voices and address their needs. Under the framework, an integrated LDN and SLM database comprised of consolidated data from various sources, including UNCCD reports and remote sensing platforms such as MODIS and Landsat will be developed. The database will be stored in a centralized GIS platform managed by the Ministry of Environment, ensuring accessibility and standardization of metadata for comprehensive land monitoring. An Environmental Decision Support System (EDSS) will be designed to provide real-time environmental data and facilitate gender-sensitive data-driven decision-making. It will integrate geospatial data, satellite imagery, and meteorological information into a user-friendly system to support land managers in making informed decisions. A comprehensive stakeholder consultation and a gender-responsive approach will be applied, as detailed below.

Outcome 2.1. Improved land use planning and sustainable land management in the Irano-Turanian zone, leading to an more inclusive and productive decision-making system

Outcome 2.1 aims to strengthen land use planning and sustainable land management (SLM) in the northern Badia by fostering an inclusive, gender-responsive, and evidence-based decision-making system. This outcome seeks to integrate environmental, socio-economic, and climate considerations into planning processes, ensuring that land use decisions support productivity, biodiversity conservation, equitable resource access, and climate resilience.

Output 2.1.1: Accurate, Validated, and Integrated LDN Database Developed and in Operation

Under this output, a centralized, validated, and operational GIS-based database will be established to support Land Degradation Neutrality (LDN) and sustainable land management (SLM) initiatives.

Activity 2.1.1.1: Compile and Standardize Datasets

This activity will focus on consolidating (compiling, validating, and standardizing) the available dispersed datasets relevant to Land Degradation Neutrality (LDN) and Sustainable Land Management (SLM) into a single, robust, high-quality and harmonized database. Currently, critical datasets—such as land cover maps, soil organic carbon (SOC) levels, net primary productivity (NPP) trends, groundwater recharge data, and socio-economic land use statistics—are scattered across multiple ministries, research institutes, and donor-funded projects, often in inconsistent formats. The project will initiate a comprehensive data inventory through bilateral consultations with institutions like the Ministry of Environment, Ministry of Agriculture, Department of Statistics, universities, Ministry of Local Development, and NGOs. This will involve mapping all potential sources of geospatial, environmental, socio-economic, and land-use data from national agencies, research institutions, international datasets, and community-based monitoring programs. Each dataset will be assessed for its spatial coverage, temporal resolution, quality, and relevance to sustainable land

management and land degradation monitoring. Particular attention will be given to datasets that capture biodiversity, soil health, vegetation cover, water resources, and climate variability, ensuring that the database supports integrated analyses of ecological and socio-economic drivers of land degradation. The collecteddatasets will undergo a rigorous validation and quality assurance process. This will include assessing the accuracy, completeness, and consistency of data, detecting errors, and resolving conflicts between datasets. After validation, the datasets will be standardized, involving involving harmonizing coordinate systems, projection formats, attribute schemas, and data structures across all datasets. The data will then be converted into interoperable formats with the national GIS platform (e.g., shapefiles, GeoTIFF, CSV), and standardized using international metadata and classification protocols (e.g., FAO's LCCS for land cover). A technical task force of GIS experts, statisticians, and IT officers will oversee the harmonization process, ensuring that datasets can be compared across time and space. Special attention will be given to disaggregating socio-economic data by gender and age, to enable gender-responsive LDN monitoring. This activity will address the current fragmentation that hinders evidence-based decision-making. It will also prevent duplication of efforts, reduce costs, and increase efficiency in reporting to international conventions like UNCCD. Ultimately, this step provides the raw foundation upon which a centralized, user-friendly GIS platform can be built, ensuring that Jordan has a credible and consistent knowledge base to design, implement, and monitor land management strategies in the northern Badia.

Activity 2.1.1.2: Develop Metadata Protocols

Once datasets are compiled, the next step will be to establish clear metadata standards to support data usability, transparency, and long-term sustainability. Metadata protocols will define the essential descriptors for each dataset, including spatial resolution, temporal coverage, accuracy levels, data source, collection methodology, responsible institution, and update frequency. These protocols will be aligned with best practices for geographic information. A metadata catalog will be created as part of the database, allowing users—from government officials to community organizations—to understand the quality and limitations of each dataset before applying it in planning or policy-making. Developing metadata protocols will also help institutionalize accountability, e.g. each dataset will have a designated custodian responsible for updating and maintaining it. Workshops will be held with participating institutions (Ministry of Environment, universities, Royal Geographic Center) to train staff in applying the protocols consistently. Gender and social indicators will also be embedded in the metadata framework, making it explicit when and how women's and youth data are captured. Without proper metadata, datasets risk becoming "black boxes" that are misinterpreted or underutilized. In contrast, standardized protocols will transform the integrated LDN/SLM database into a trusted national reference point, facilitating cross-sectoral collaboration, avoiding duplication, and strengthening Jordan's technical credibility in international reporting.

Activity 2.1.1.3: Set up GIS-Based Platform

This activity will establish the central operational hub of the integrated database: a GIS-based platform hosted and managed by the Ministry of Environment. The platform will be built using robust, scalable technologies (e.g., PostgreSQL/PostGIS, GeoServer, or ArcGIS Enterprise) with an emphasis on open-source solutions to reduce long-term costs. The system will integrate spatial datasets (land cover, SOC, NPP, climate, hydrology) with socio-economic and demographic data, enabling cross-layer analysis. A user-friendly web interface will allow different levels of access: policymakers will access dashboards with summary indicators, researchers will query raw spatial layers, and community groups will view simplified maps and charts relevant to their local areas. The platform will also feature interactive mapping, time-series visualization, and export functions for use in reports and presentations. Hosting the system within the Ministry of Environment promotes national ownership, while inter-institutional agreements will formalize data-sharing arrangements with other agencies (e.g., Ministry of Agriculture, RSCN). Security protocols, including user authentication and regular backups, will be embedded to protect sensitive datasets. The platform will be piloted in the Irano-Turanian zone before national scaling. Establishing a centralized GIS-based platform is critical to overcoming the current fragmentation of land data across Jordan. It will provide a one-stop system for evidence-based planning, monitoring of restoration interventions, and compliance with global reporting obligations. In essence, this activity transforms data into a practical decision-support tool, linking scientific evidence with policy action at local and national levels.

Activity 2.1.1.4: Train users in data entry and use

A database is only as effective as the capacity of its users to manage and apply it. This activity will therefore provide targeted training for government staff, local planners, researchers, and civil society representatives in both data entry and data use. Training will be delivered in modular form: (1) data entry and quality control, (2) geospatial analysis and visualization, and (3) application of database outputs for land use planning, restoration monitoring, and policy design. Hands-on sessions will be held at national and governorate levels, with field demonstrations to link geospatial data to on-the-ground realities. A gender-responsive training strategy will promote the active inclusion of women professionals, young graduates, and community-based organizations, targeting at least 40% female

participation. Training materials will be developed in Arabic and English, and refresher courses will be organized annually to keep skills up to date. To sustain capacity, a "train-the-trainer" approach will be applied, enabling selected participants from universities and ministries to cascade skills to colleagues. This activity also includes setting up a helpdesk and user manual to support continued use of the platform. The rationale is clear: without adequate user capacity, the integrated database risks becoming underutilized or abandoned. This activity will establish the system as a living national resource—supporting transparent, inclusive, and science-driven decision-making for sustainable land management in Jordan.

Output 2.1.2: Environmental decision support system (EDSS) designed and implemented

An Environmental Decision Support System (EDSS) will be designed, tested and deployed to enhance evidence-based land management and policy-making. The EDSS will be structured to integrate spatial, environmental, and socio-economic data with predictive modelling tools, enabling scenario-based decision support for restoration, resource allocation, and climate adaptation.

Activity 2.1.2.1. Design user-friendly EDSS integrating geospatial and climate data

The first step will involve designing an Environmental Decision Support System (EDSS) tailored to the complex challenges of the Irano-Turanian zone. This activity will begin by defining the system architecture in consultation with national technical institutions, the Ministry of Environment and other relevant ministries, and leading universities with expertise in GIS, remote sensing, and climate science. The EDSS will be developed as a modular, web-based platform capable of integrating geospatial datasets (e.g., land cover, soil organic carbon, vegetation indices) with climate data (e.g., rainfall, temperature, drought indices) to support scenario-based planning. Open-source software (e.g., QGIS, PostgreSQL, Python) will be prioritized to reduce costs and support long-term sustainability. Participatory design workshops will be conducted with government planners, district technical staff, and community representatives to make the interface intuitive, multilingual, and accessible to both technical and non-technical users. The design will include dashboards with visualization tools, layered maps, and customizable indicators for land degradation neutrality (LDN) and sustainable land management (SLM). Specific attention will be paid to integrating restoration and land use planning outputs generated under other components of the project. The EDSS will be hosted within the Ministry of Environment's IT infrastructure to guarantee institutional ownership and long-term management. This design phase is crucial because it enables the platform to respond to real decision-making needs rather than functioning as a purely technical tool with limited practical utility. Ultimately, the EDSS design will set the foundation for an evidence-based, inclusive planning system that enhances climate resilience and sustainable resource management in the zone.

Activity 2.1.2.2. Pilot test with government and community users

Once the EDSS design is completed, a pilot testing phase will be carried out to evaluate functionality, usability, and relevance in real-world decision-making contexts. This activity will take place in at least two governorates within the Irano-Turanian zone, where local government authorities, district planners, and community-based organizations are actively engaged in land use and restoration initiatives. The pilot will begin with a structured orientation for selected users, including local officials, agricultural extension workers, and women/youth representatives. They will be guided through simulated exercises such as assessing rangeland degradation, prioritizing reforestation sites, or identifying climate-vulnerable communities using the EDSS. Feedback sessions will be organized to gather insights on interface clarity, data relevance, and accessibility. The pilot will also test system interoperability with existing platforms and databases, including the integrated LDN/SLM database developed under Output 2.1.2. Technical staff will monitor system performance, troubleshoot technical issues, and refine algorithms or workflows based on user feedback. Importantly, gender responsiveness will be assessed by ensuring that women's and youth groups are represented in the pilot, with attention to whether the tool enables them to meaningfully contribute to planning decisions. The pilot testing will culminate in validation workshops where stakeholders collectively assess the EDSS's strengths, weaknesses, and improvement needs.

Activity 2.1.2.3. Train stakeholders in application of the EDSS

Following successful pilot testing, systematic training will be rolled out to build the technical and operational capacity of stakeholders at multiple levels. Training sessions will be designed as hands-on workshops, targeting national government staff (Ministry of Environment, Ministry of Agriculture), governorate planners, local extension workers, and community leaders. The curriculum will cover technical aspects—such as uploading and analyzing geospatial datasets, generating LDN/SLM maps, and applying climate risk scenarios—as well as practical applications like preparing land use plans, monitoring restoration outcomes, and informing policy

decisions. The training will adopt a "train-the-trainer" model to support sustainability, enabling selected participants (including women and youth) to become local champions who can cascade skills to their peers. Mobile and offline-compatible versions of training materials (e.g., manuals, video tutorials, infographics) will be developed to improve accessibility even in remote areas with limited internet connectivity. Gender-responsive facilitation methods, such as separate breakout groups for women, will be used to encourage active participation from all groups. Training will take place both at national hubs (e.g., ministry offices and universities) and at decentralized levels in governorates and community centers to maximize reach.

Activity 2.1.2.4. Integrate gender-sensitive decision-support tools

To promote equity and inclusivity, the final activity will focus on embedding gender-sensitive tools and methodologies within the EDSS. This involves identifying decision-support parameters that explicitly address the needs, roles, and contributions of women, youth, and local communities in land use and restoration planning. For example, the EDSS will include modules to map women's access to natural resources, labor contributions in rangeland management, and exposure to climate risks. Participatory gender analysis workshops will be held with women's cooperatives, pastoralist associations, and youth groups to co-design these modules, ensuring they reflect lived realities. The platform will also integrate indicators that disaggregate data by gender and age, allowing policymakers to evaluate how proposed interventions differentially affect men and women. In addition, the system will feature decision-support dashboards tailored for community use, such as visualizations of household-level benefits from restoration practices or income opportunities from sustainable land management. Gender-sensitive guidelines will be embedded into the EDSS interface to prompt users to consider inclusivity in all planning scenarios. Training materials developed under Activity 2.1.3.3 will also be updated to include modules on gender-responsive planning. This activity is critical for aligning the EDSS with broader gender action plans under Component 3 and for ensuring that policies and interventions derived from the system promote equitable access to resources, resilience building, and long-term sustainability of restoration efforts.

Outcome 2.2. Sustainable livelihoods and rangeland-based value chains strengthened to support adoption of sustainable land management practices in the northern Badia

This outcome will address the socio-economic drivers of land degradation in the northern Badia by strengthening livelihoods that are directly linked to sustainable rangeland management (SLM). Pastoral and agro-pastoral communities in the region rely heavily on rangeland resources for income and subsistence; however, limited access to finance, weak market linkages, and underdeveloped value chains have constrained their ability to adopt and sustain SLM practices. However, ecological restoration and land degradation neutrality can only be achieved if communities derive tangible economic benefits from sustainable land use. Through targeted livelihood support mechanisms and rangeland-based value chain development, the project will enhance household incomes while simultaneously reducing pressure on fragile rangeland ecosystems. The project will create positive incentives for adopting practices such as controlled grazing, reseeding, restoration planting, among others, by increasing income from rangeland-based products by approximately 10-25% among supported households. These livelihood interventions will be explicitly aligned with land use plans and restoration priorities developed under the project, ensuring coherence between economic development and environmental objectives. Women and youth — who often face barriers to finance, markets, and productive resources — will be prioritized across all interventions, particularly through access to revolving funds, producer groups, nursery operations, and value addition activities. Traditional knowledge and community institutions will be leveraged to promote cultural appropriateness and long-term sustainability.

Output 2.2.1. Community-managed revolving fund established and operational

Access to affordable and inclusive finance will be improved for pastoral and agro-pastoral communities to support rangeland-compatible livelihood activities. A revolving fund will be established as a community-managed financial mechanism that will enable households to invest in income-generating activities aligned with sustainable land management, through enterprises such as forage production, seed multiplication, beekeeping, small-scale processing, and land restoration. The process will begin with participatory community consultations to design a governance structure, develop eligibility criteria, and operational guidelines that will reflect local contexts and priorities. These consultations will strengthen transparency, community ownership, and accountability, culminating in a formally approved operational manual and governance framework. Particular attention will be given to ensuring equitable access for women and youth. Capacity building will be a critical component of the fund's sustainability. Community committees will be trained in financial management, governance, record-keeping, and loan monitoring to support professional and transparent fund

administration. Upon the establishment of appropriate capacity, the fund will be capitalized and formally launched, with clear procedures for loan applications, approvals, disbursement, and repayment. Monitoring mechanisms will be embedded from the outset to track fund utilization, repayment performance, and reinvestment cycles. Regular financial performance reports will be generated to allow for adaptive management and corrective actions, helping maintain fund viability beyond the project lifespan. The revolving fund once fully operational, will support at least 100 beneficiaries, with strong participation of women and youth.

Activity 2.2.1.1: Design governance structure, eligibility criteria, and operational guidelines for the revolving fund

This activity will lay the institutional and operational foundation for the community-managed revolving fund, ensuring that it is transparent, inclusive, accountable, and sustainable. The process will begin with structured community consultations involving pastoral households, women's groups, youth representatives, traditional leaders, and relevant local authorities. These consultations will aim to build shared understanding and ownership of the revolving fund, clarify its objectives, and align it with locally relevant, rangeland-compatible livelihood priorities. Through participatory discussions, an appropriate governance structure will be designed, defining clear roles and responsibilities for fund management committees, oversight bodies, and beneficiary groups. Particular attention will be given to ensuring gender-balanced representation and mechanisms that prevent elite capture. Eligibility criteria will be developed to guide access to loans, prioritizing activities that will support sustainable land management, such as fodder production, forage seed multiplication, beekeeping, restoration-linked enterprises, and small-scale value addition. Provisions will be included to support equitable access for women, youth, and vulnerable households. Based on the agreed governance and eligibility framework, a comprehensive operational manual will be developed. This manual will outline procedures for loan application, appraisal, approval, disbursement, repayment schedules, record-keeping, grievance redress, risk management, and reinvestment of repaid funds. Safeguards related to environmental sustainability and social inclusion will be embedded into the guidelines. The operational manual and governance framework will be validated through stakeholder review workshops, incorporating feedback from communities, implementing partners, and technical experts. Once finalized and formally approved, these documents will provide a legally and institutionally sound basis for launching the revolving fund.

Activity 2.2.1.2: Build financial management and governance capacity of community committees

Effective financial governance is essential to maintaining transparency, accountability, and trust among beneficiaries, as well as ensuring the long-term viability of the fund beyond the project period. Committee members will first be identified and constituted through a transparent and inclusive community process, ensuring balanced representation of women and youth in leadership and decision-making roles. A capacity needs assessment will then be conducted to identify gaps in financial literacy, governance, loan appraisal, record-keeping, conflict resolution, and reporting among the committee members. The findings will inform the development of a tailored training programme that will respond to local needs and capacities. Training sessions will be delivered using participatory and practical approaches, combining classroom instruction with hands-on exercises and case studies relevant to community-managed funds. Key training topics will include basic accounting, cash flow management, loan portfolio management, risk assessment, internal controls, ethical conduct, and compliance with the revolving fund operational manual. Special emphasis will be placed on transparency, accountability, and gender-responsive governance. Following the training, the committee will be assessed against predefined competency criteria to confirm their capacity to manage the fund effectively. Mentoring and refresher training will be provided throughout the project period to reinforce skills, address emerging challenges, and support adaptive management. This will enable the revolving fund to be managed responsibly, build community confidence, minimize financial risks, and create a solid institutional foundation for sustainable livelihood financing linked to sustainable land management.

Activity 2.2.1.3: Capitalize and launch the revolving fund

Once governance structures are established and management committees are trained, project resources will be mobilized and transferred as seed capital to the revolving fund. Dedicated financial accounts will be opened in accordance with the approved operational guidelines to strengthen transparency and accountability. A formal fund launch will be conducted through community sensitization meetings, where potential beneficiaries will be informed about the objectives of the revolving fund, eligibility criteria, loan terms, repayment conditions, and application procedures. This outreach will raise broad awareness and encourage inclusive participation, particularly among women and youth. The capitalization and launch of the revolving fund will represent a critical transition from planning to implementation, translating project design into tangible economic support for sustainable land management adoption. The first call for loan applications will be issued, targeting income-generating activities aligned with LDN and SLM objectives. Beneficiaries will be required invest in sustainable livelihood activities that reduce pressure on rangelands and improve income security. Loan applications will be reviewed by the community committees using transparent and standardized appraisal criteria. Approved loans will be disbursed in accordance with established procedures, and comprehensive beneficiary records will be

maintained, including loan amounts, intended use, repayment schedules, and demographic information. Initial lending cycles will be closely monitored to identify operational challenges and verify compliance with governance and financial management standards. Lessons learned during the early implementation phase will be used to refine procedures and strengthen fund operations.

Activity 2.2.1.4: Monitor fund utilization, repayment, and reinvestment

Robust monitoring is essential to track how funds are utilized, assess repayment performance, and confirm that repaid resources are reinvested in line with agreed objectives. Monitoring tools and loan tracking systems will be developed to capture detailed information on loan disbursements, beneficiary compliance, repayment schedules, and fund balances. The community committees will be trained to use these tools consistently and accurately, enabling real-time oversight of the fund's performance. Monitoring data will be reviewed regularly to identify trends, risks, and emerging issues such as delayed repayments or misuse of funds. Periodic reviews of repayment cycles will be conducted, allowing committees to apply corrective measures where necessary. These may include targeted advisory support to beneficiaries, rescheduling of repayments under agreed conditions, or enforcement of penalties as defined in the operational manual. Financial performance reports will be produced at regular intervals and shared with relevant stakeholders to reinforce transparency and accountability. Lessons learned from monitoring activities will be documented and used to improve fund governance, refine procedures, and strengthen risk management.

Output 2.2.2. Markets for rangeland-based products developed and promoted

Many pastoral products — such as fodder, forage seed, honey, medicinal plants, and livestock by-products — are produced informally, with limited market access and low value capture for producers. Strengthening markets will therefore be essential for improving livelihoods and incentivizing sustainable resource management. The process will begin with participatory market and value chain assessments to identify priority products, map market actors, and analyze constraints and opportunities. These assessments will inform targeted interventions tailored to local production systems and demand conditions. Producer aggregation and quality assurance mechanisms will then be established to improve consistency, volumes, and product standards, enabling small-scale producers to engage competitively in markets. Buyer–seller linkages will be facilitated through structured engagement platforms, negotiations, and the formalization of agreements such as contracts or memoranda of understanding. At least ten functional market linkages will be established, contributing to increased incomes and reduced reliance on unsustainable land use practices. These linkages will provide producers with more reliable market outlets and better price transparency. Market promotion activities — including information systems, outreach campaigns, and promotional materials — will raise the visibility of rangeland-based products and improve access to market intelligence.

Activity 2.2.2.1: Conduct market assessment for priority rangeland-based products

A comprehensive market assessment will be undertaken to identify priority products with the highest potential to generate income while remaining compatible with sustainable rangeland management. Products assessed may include livestock and livestock-derived products, forage seeds, medicinal and aromatic plants, honey, wool, and other non-timber rangeland products. The assessment will examine supply-side and demand-side dynamics, including production volumes, quality standards, seasonality, pricing trends, market access constraints, and value addition opportunities. It will also evaluate existing market actors, infrastructure, transport logistics, and institutional arrangements influencing market performance. Special attention will be given to identifying barriers faced by women and youth in accessing markets. Primary data will be collected through field surveys, focus group discussions, and key informant interviews with producers, traders, processors, cooperatives, and relevant public and private sector stakeholders. Secondary data from government sources, research institutions, and previous studies will also be reviewed. Environmental sustainability considerations will be integrated so that market expansion does not incentivize overexploitation of rangeland resources. The findings will be synthesized into a market assessment report that will prioritize products based on economic viability, scalability, environmental sustainability, and inclusiveness. The report will provide clear recommendations for targeted market interventions under the project. Validation workshops will be held with communities and partners to confirm the findings and build consensus.

Activity 2.2.2.2: Strengthen producer groups and cooperatives for market engagement

Producer groups, cooperatives, and community enterprises will be identified or formed where necessary, with deliberate inclusion of women and youth. Strengthening collective action will be essential for improving bargaining power, reducing transaction costs, and meeting market requirements related to quality and volume. Capacity-building interventions will be delivered to enhance organizational governance, business planning, collective marketing, record-keeping, and negotiation skills. Training modules will be tailored to the specific products and market opportunities identified under Activity 2.2.2.1. Groups will also be supported to adopt basic quality control measures, grading standards, and packaging practices that improve product competitiveness. Where appropriate, legal registration and formalization of producer organizations will be supported to enable access to formal markets, financial services, and contractual arrangements. Mentorship and coaching will be provided to emerging producer leaders to strengthen leadership, transparency, and accountability within groups. Linkages will be fostered between producer organizations and relevant extension services, business development service providers, and financial institutions, including the revolving fund established under Output 2.2.1. This integrated support will enable producer groups to transition from subsistence-oriented production to market-oriented enterprises.

Activity 2.2.2.3: Facilitate market linkages and buyer–producer partnerships

Based on the market assessment findings, targeted market linkage initiatives will be implemented to connect producers with traders, processors, wholesalers, and institutional buyers. Market forums, buyer–seller meetings, and business-to-business (B2B) exchanges will be organized at local and regional levels. These platforms will provide opportunities for producers to showcase their products, negotiate terms, and understand buyer requirements related to quality, volume, certification, and delivery schedules. Where feasible, contract farming or supply agreements will be facilitated to provide predictable market access and income stability. Producers will also be supported to comply with basic market standards, including product traceability, quality assurance, and sustainable sourcing practices. Advisory support will be provided to both producers and buyers to reduce transaction risks and build trust. Particular emphasis will be placed on inclusive market access, ensuring that women- and youth-led enterprises benefit from new partnerships. Environmental safeguards will be applied to prevent increased market demand from undermining rangeland sustainability.

Activity 2.2.2.4: Promote rangeland-based products through branding, awareness, and information dissemination

The visibility and market appeal of rangeland-based products will then be enhanced through targeted promotion and information dissemination. This will contribute to sustained demand for rangeland-based products and reinforce the economic rationale for sustainable land management. Simple branding strategies will be developed to highlight the environmental sustainability, cultural value, and quality attributes of products derived from sustainably managed rangelands. Promotional materials, including brochures, product labels, and digital content, will be produced in collaboration with producer groups and local authorities. Awareness campaigns will be conducted at local markets, trade fairs, and regional exhibitions to expand market reach and attract new buyers. Success stories showcasing sustainable livelihoods and rangeland restoration outcomes will be documented and shared. Market information systems will be strengthened to provide producers with timely information on prices, demand trends, and buyer requirements. This will improve decision-making and reduce information asymmetry.

Output 2.2.3. Priority rangeland-based value chains developed and promoted

Priority value chains will be identified through participatory analysis, ensuring alignment with local capacities, ecological conditions, and market demand. At least four priority value chains will be developed to contribute to increased incomes, diversified livelihoods, and reduced pressure on rangelands, reinforcing sustainable land management adoption. Producer groups and cooperatives will be formed or strengthened to improve organization and access to services. Capacity building in processing, storage, packaging, and value addition will enable producers to capture greater value locally and reduce post-harvest losses. Equipment and facilities will be provided where necessary, accompanied by targeted training. Private-sector engagement will be facilitated to promote inclusive business models, investment, and long-term market sustainability. Partnerships with traders, processors, and service providers help integrate community producers into broader value chains.

Activity 2.2.3.1: Identify and prioritize rangeland-based value chains

This activity provides the analytical foundation for targeted investment in rangeland-based value chains that can deliver sustainable income while incentivizing adoption of sustainable land management practices in the targeted landscapes of the northern Badia. The process will begin with the identification of a broad range of candidate value chains derived from rangeland resources, such as forage

seed, fodder production, honey, medicinal and aromatic plants and other non-timber rangeland products. A participatory and evidence-based approach will be applied, engaging pastoral communities, producer groups, women and youth representatives, local authorities, private-sector actors, and technical experts. Selection criteria will jointly defined and may include ecological sustainability, market demand, income potential, climate resilience, labor requirements, gender and youth inclusivity, and compatibility with land degradation neutrality objectives. Value chain analyses will be conducted for shortlisted options to assess production practices, input requirements, costs, value addition opportunities, market access, risks, and environmental impacts. Particular attention will be given to identifying how improved rangeland management — such as controlled grazing, reseeding, and restoration — can directly enhance productivity and product quality. Findings will be consolidated into a value chain prioritization and analysis report, which clearly justify the selection of priority value chains for project support. This report will be validated through a stakeholder workshop to strengthen local ownership and alignment with national strategies.

Activity 2.2.3.2: Support formation and strengthening of producer groups and cooperatives

Producers engaged in the prioritized value chains will be mobilized into inclusive producer groups and cooperatives to enhance local economies of scale, quality control, and market access. This will begin with community sensitization to highlight the benefits of collective organization, particularly for small-scale pastoralists, women, and youth. Interested producers will be supported to form groups based on shared value chain interests and geographic proximity. Governance structures will be established, including leadership roles, bylaws, decision-making mechanisms, and accountability systems that are aligned with the national context. Capacity-building support will be provided to strengthen organizational management, financial literacy, record-keeping, conflict resolution, and compliance with legal and market requirements. Where appropriate, groups will be supported to formally register as cooperatives or producer associations, enabling them to engage in contracts, access finance, and participate in structured markets. Special emphasis will be placed on ensuring gender-responsive and youth-inclusive participation, including representation in leadership positions. Linkages will also be fostered between producer groups and extension services, financial institutions, and market actors.

Activity 2.2.3.3: Build capacity in processing, storage, packaging, and value addition

Capacity gaps along the selected value chains will first be assessed to identify constraints related to processing technologies, storage, packaging, quality standards, and compliance with market requirements. Based on the assessment, appropriate processing and value addition technologies will be introduced as applicable, such as fodder processing equipment, honey extraction and handling tools, drying and packaging facilities for medicinal plants, or forage seed cleaning and storage systems. Equipment will be selected to be affordable, scalable, and suitable for arid environments. Training programmes will be delivered to producer groups on processing techniques, hygiene and quality standards, post-harvest handling, packaging, labeling, and basic business management. Participants will be supported to apply improved practices that enhance product quality, shelf life, and market competitiveness. Value addition will be closely linked to sustainable rangeland management by promoting practices that improve resource productivity without degrading ecosystems. Environmental safeguards will be integrated to prevent excessive utilization of rangeland resources. As a result, producers will begin generating higher-value products, increasing profitability and reinforcing incentives to maintain healthy rangelands.

Activity 2.2.3.4: Facilitate private-sector engagement and inclusive business models

Potential private-sector partners — including processors, traders, input suppliers, exhibition organisers and social enterprises — will be identified based on their relevance to priority value chains and commitment to sustainable sourcing. Structured engagement forums and channels will be organized to connect producers with private actors, facilitate dialogue, and explore mutually beneficial business arrangements. Support will be provided to negotiate fair terms, clarify roles and responsibilities, and integrate sustainability and gender considerations into partnership models. Inclusive business arrangements may include contract farming, off-take agreements, embedded services (inputs, training, finance), or joint ventures as well as any community-based proposals during the consultation. Technical assistance will be provided to formalize agreements and strengthen transparency and risk-sharing. This will reduce market uncertainty, improve price predictability, and encourage producers to invest in sustainable rangeland management.

Component 3: Gender responsive and community engaged knowledge management & communications

This component will guide the project in applying a gender-responsive stakeholder engagement approach, with active participation and involvement of local communities and government actors. Component 3 also focuses on capturing, sharing, and utilizing findings and insights generated throughout the project for sustainable land management, so that project results advance learning, feedback, and knowledge sharing across various stakeholders. A gender-inclusive knowledge management strategy, which will integrate gender considerations in all communication and knowledge-sharing activities, will be developed and implemented. In addition, a stakeholder participation and gender action plan will be developed and tailored to various project interventions to promote women's leadership and decision-making during project implementation. Gender-responsive interventions will be implemented, such as ensuring women's participation in land restoration activities and decision-making. To enhance the integration of traditional ecological knowledge, the project will implement a comprehensive strategy for the protection and management of traditional knowledge related to land use and resource management. The project will also establish mechanisms for documenting best practices and lessons learned from field implementation, including gender perspectives, to inform future sustainable land management practices. These insights will be shared through global knowledge-sharing platforms, such as webinars, reports, and conferences. To support long-term sustainability, a gender-responsive sustainability plan and exit strategy will be developed and integrated into the land use planning system and the EDSS.

Outcome 3.1: Project results promote learning, feedback, and knowledge sharing for sustainable land management

Knowledge generated through project activities will be systematically captured, shared, and applied to enhance sustainable land management (SLM) practices in a gender-responsive and participatory manner. Learning, feedback, and knowledge dissemination among stakeholders, including local communities, municipal authorities, women and youth, will be emphasized, thereby strengthening inclusive decision-making and long-term adoption of sustainable practices.

Output 3.1.1: A gender-inclusive knowledge management and communication strategy developed and tailored to project interventions, with a knowledge management platform and governorate-level knowledge action networks established and implemented

Under this output, an inclusive knowledge management (KM) and communication system will be developed and operationalised to enable effective collection, synthesis, and dissemination of project information, experiences, and lessons.

Activity 3.1.1.1: Develop Knowledge Management (KM) and Communication Strategy

The development of a gender-inclusive knowledge management (KM) and communication strategy will begin with a participatory assessment of stakeholder information needs, knowledge gaps, and preferred channels of communication. Consultations will involve national and governorate-level institutions, community-based organizations, women's groups, and youth associations so that diverse perspectives shape the strategy. The KM strategy will outline how project data, lessons, and results will be collected, processed, packaged, and disseminated in ways that are both scientifically rigorous and socially inclusive. Communication products will be tailored for different audiences, ranging from technical reports and policy briefs for government officials to illustrated brochures, radio programs, and community dialogues for local communities with low literacy levels. A gender lens will be embedded in the strategy, ensuring that barriers faced by women and youth in accessing information—such as language, time constraints, and technology access—are specifically addressed. The strategy will also define mechanisms for feedback and two-way learning, so that knowledge flows from communities to policymakers and back.

Activity 3.1.1.2: Launch Online and Community Platforms for KM Dissemination

Once the KM and communication strategy is finalized, the project will establish both digital and community-based platforms to operationalize it. On the digital side, an online knowledge hub will be developed under the Ministry of Environment's website, hosting geospatial data, restoration guidelines, gender-sensitive case studies, and training materials. Interactive features such as discussion forums, dashboards, and webinars will enable real-time knowledge exchange between stakeholders at different levels. Recognizing the digital divide, the project will also develop offline and community-centered platforms to expand equitable access. These will include community radio programs, SMS alerts, village noticeboards, and in-person knowledge fairs that prioritize local languages and culturally appropriate methods. Women and youth leaders will be trained to serve as local knowledge brokers, ensuring that information reaches groups often excluded from decision-making. The platforms will be designed to facilitate two-way

communication, allowing communities to share local knowledge, feedback, and innovative practices with policymakers and technical institutions.

Activity 3.1.1.3. Establish municipal-level knowledge action networks

At the subnational level, municipal-level Knowledge Action Networks (KANs) will be established to serve as focal points for knowledge exchange, capacity building, and collaborative problem-solving. Each KAN will bring together representatives from local government, civil society organizations, research institutions, community leaders, women's associations, and youth groups. These networks will meet regularly to share updates, discuss challenges, and co-develop solutions for sustainable land management (SLM) and restoration. The project will provide facilitation, training, and seed funding for small-scale demonstration activities led by KAN members, ensuring that knowledge sharing is practical and grounded in local realities. Gender and youth inclusion will be mandatory criteria in the formation and leadership of KANs, with at least 40% women and 30% youth represented. The networks will also function as conduits for relaying community-level insights and traditional knowledge into higher-level policy processes.

Activity 3.1.1.4: Organize Capacity-Building Workshops, Webinars, and Publications

To strengthen learning and cross-pollination of ideas, the project will organize a series of structured workshops, webinars, and publications. Annual multi-stakeholder workshops will provide opportunities for national and local actors to review progress, showcase success stories, and debate emerging challenges in LDN and SLM. Targeted thematic workshops will address issues such as gender integration, climate-resilient restoration, and decision-support tools, drawing on expertise from universities, international partners, and local practitioners. Webinars will be designed to reach a wider audience, enabling knowledge exchange across governorates and even across countries in the Irano-Turanian region. Knowledge products such as peer-reviewed publications, policy briefs, training manuals, and community handbooks will be produced in both English and local languages, ensuring scientific rigor while maximizing accessibility. Women and youth will be prioritized in both the authorship and target readership of these outputs, ensuring their perspectives and experiences are represented in formal knowledge products. These communication efforts will not only disseminate project findings but also strengthen networks of practice, enhance policy advocacy, and promote replication of successful interventions beyond the project area.

Output 3.1.2: Stakeholder engagement plan and gender action plan for sustainable land management developed and tailored to project interventions

This output will produce a comprehensive stakeholder and gender map, with all relevant actors across project regions identified. This mapping will inform the development of a stakeholder engagement plan that will align community, municipal, and institutional priorities with project objectives while integrating a clear gender action framework.

Activity 3.1.2.1: Map Stakeholders and Gender Roles in Restoration

This activity will involve identifying and mapping all relevant stakeholders expected to participate in sustainable land management (SLM) and restoration efforts. The process will generate a foundational understanding of the social landscape, ensuring that upcoming project interventions are inclusive, gender-responsive, and reflective of community needs—particularly those of women, youth, and local communities. The project team will compile an inventory of government agencies, local authorities, community-based organizations, women's and youth groups, traditional leaders, research institutions, and private sector actors with potential roles in restoration. These stakeholders will be categorized according to their expected responsibilities, influence, and potential contributions. Participatory mapping exercises are planned to engage local communities through discussions, interviews, and workshops. These will help identify social networks, power relations, and resource access patterns that shape land-use decision-making. A concurrent gender analysis will assess the anticipated participation of women, men, youth, and vulnerable groups, highlighting barriers, opportunities, and areas requiring targeted support. Findings will later be validated with stakeholders to confirm accuracy and strengthen ownership. The final mapping report will guide the development of the Stakeholder Engagement Plan and the Gender Action Plan, supporting inclusive and socially sustainable project implementation.

Activity 3.1.2.2: Draft and Validate Stakeholder Engagement Plan

A comprehensive and gender-responsive Stakeholder Engagement Plan (SEP) will be developed to guide participation in sustainable land management and restoration activities. Using insights from the planned stakeholder and gender mapping, the project team will draft an SEP that outlines clear engagement objectives, roles, and context-specific strategies for involving government actors, community groups, women and youth populations. The draft SEP will propose suitable communication channels, participatory methods, and mechanisms to promote transparency, collaboration, and equitable involvement in planning and implementation. Once completed, the draft will be presented in multi-stakeholder consultation workshops, where participants will review and validate the proposed approaches and provide recommendations for strengthening inclusion and accountability. Based on this feedback, the plan will be revised and finalized for endorsement. The validated SEP will serve as a strategic framework for participatory planning, ongoing engagement, and gender-responsive implementation across all project sites, helping foster ownership and social sustainability of land management actions.

Activity 3.1.2.3: Implement Participatory Planning Sessions in line with the Stakeholder Engagement Plan

This activity will support the implementation of community-led participatory planning sessions across all target sites, ensuring that local stakeholders actively shape the project's sustainable land management and restoration strategies. Building on the validated Stakeholder Engagement Plan, the project will organize planning sessions that are accessible, inclusive, and well coordinated. Community leaders, women's groups, youth representatives, local institutions, and technical experts will be mobilized to participate. The sessions will apply participatory rural appraisal tools, mapping exercises, and scenario discussions to capture community perspectives on land use challenges, restoration priorities, and resource management needs. Special emphasis will be placed on ensuring strong participation from women and youth in line with project inclusion commitments. Through these structured dialogues, communities will collaboratively identify site-specific opportunities, constraints, and preferred restoration options. Their contributions will guide the development of draft participatory plans that outline practical actions, locally appropriate solutions, roles and responsibilities, and indicative timelines. The project team will align these plans with broader project objectives and gender-responsive approaches. The activity will produce community-endorsed planning outputs that strengthen local ownership, enhance collaborative decision-making, and support socially sustainable implementation of future land management interventions.

Activity 3.1.2.4: Monitor Inclusion of Women Groups and Local Communities during Stakeholder engagement

The project will develop a gender and inclusion monitoring framework that outlines indicators, data collection methods, and reporting procedures to track participation—particularly of women, youth, and other local communities. Using participatory tools, surveys, focus group discussions, and digital tracking methods, the project will monitor quarterly participation across all engagement and planning activities. The monitoring will assess not only representation but also the quality of engagement and the extent to which women and youth influence decision-making. Data will be analyzed to identify trends, gaps, and barriers, enabling the project team to apply corrective actions such as targeted outreach or strengthened facilitation. Quarterly gender inclusion reports will document progress and challenges and will be shared with key stakeholders to promote transparency. This activity will strengthen ownership, facilitate equitable participation, and advance socially sustainable land management interventions.

Output 3.1.3: Traditional knowledge related to land use and resource management documented and applied in project implementation

A comprehensive strategy for safeguarding and integrating traditional knowledge (TK) related to land use and natural resource management into project implementation will be developed. The project will identify key knowledge holders and document indigenous practices covering soil management, land restoration, biodiversity conservation, and climate-adaptive techniques.

Activity 3.1.3.1: Document traditional Knowledge and Practices

Traditional knowledge (TK) land management practices that contribute to sustainable natural resource management in the project areas will be identified and documented. The project will engage communities to identify key knowledge holders—including women, elders, and traditional resource managers—using participatory consultations, interviews, and focus group discussions. These individuals will help reveal practices related to soil conservation, water harvesting, agroforestry, crop rotation, and biodiversity management. Field visits will then be organized to observe and document these practices using standardized tools such as observation

checklists, photographs, and participatory mapping. Community members will be involved throughout the documentation process to strengthen accuracy, cultural sensitivity, and local ownership. The recorded information will later be validated through community meetings, where participants will review and refine the documented practices, strengthening trust and confirming authenticity. Finally, all validated practices will be compiled and uploaded into a digital repository for integration into the project's knowledge management system and Environmental Decision Support System. This will lay the foundation for incorporating indigenous knowledge into planning and promoting culturally grounded, community-led approaches to sustainable land management.

Activity 3.1.3.2: Conduct Knowledge Transfer Forums

Planning and community mobilization will be conducted, during which community leaders, women's groups, youth representatives, farmers, and local institutions will be invited to participate. Outreach efforts will aim to achieve broad, gender-inclusive engagement and prepare participants for interactive learning. A series of participatory knowledge transfer forums will then be organized. These sessions will use demonstrations, field-based learning, and guided discussions to showcase traditional practices related to soil fertility management, water conservation, biodiversity protection, agroforestry, and climate-resilient farming. Women knowledge holders and other identified experts will help lead these sessions, promoting peer-to-peer learning and recognition of local expertise. Feedback will be collected from participants to capture lessons, challenges, and opportunities for adopting traditional practices. This information will be used to refine future forums and support integration of IK into the project's knowledge management system and Environmental Decision Support System.

Activity 3.1.3.3: Develop Guidelines for Integrating Traditional Knowledge (TK)

Building on the documentation and knowledge transfer outputs from previous activities, the project will first review validated traditional practices related to soil fertility, water conservation, biodiversity, climate adaptation, and other sustainable land use interventions. Special attention will be given to practices held by women and other groups to advance gender-responsive inclusion. Consultations will be conducted with community members, traditional knowledge holders, municipal authorities, technical experts, and gender-focused institutions to validate the relevance and applicability of proposed integration approaches. Feedback will guide the drafting of actionable guidelines, detailing step-by-step procedures for documenting, codifying, and applying traditional knowledge within planning processes, KM platforms, and EDSS modules. The draft guidelines will undergo iterative review and refinement with stakeholders before formal validation.

Activity 3.1.3.4: Integrate Traditional Knowledge into EDSS and KM Systems

This activity will focus on embedding documented and validated traditional knowledge (TK) into the project's Environmental Decision Support System (EDSS) and Knowledge Management (KM) platforms, ensuring that indigenous practices inform sustainable land management decisions. The process will begin with translating, categorizing, and digitally formatting TK content collected in previous activities, organizing practices by themes such as soil conservation, water management, biodiversity, climate adaptation, and gender-inclusive resource use. Particular attention will be given to knowledge contributed by women, ensuring equitable representation. Next, technical integration into the EDSS and KM platforms will be undertaken, including database development, interface design, and visualization tools that allow users to access, simulate, and apply traditional knowledge in land-use planning and restoration scenarios. Interoperability with GIS-based data and decision-support functionalities will be integrated. User validation and testing workshops with municipal planners, community representatives, and technical staff will refine usability and relevance. Following feedback incorporation, TK modules will be fully deployed, with training provided to users. This activity will operationalize indigenous knowledge, strengthen community ownership, and enable gender-sensitive, culturally-informed, and sustainable land management across project sites.

Output 3.1.4: Gender-responsive sustainability plan and exit strategy developed and integrated in project implementation

This output will deliver a comprehensive, gender-responsive sustainability and exit strategy to maintain project benefits beyond the project's lifecycle.

Activity 3.1.4.1: Draft Sustainability and Exit Strategy

A comprehensive sustainability and project exit strategy will be developed to maintain gains in gender-responsive and community-led sustainable land management beyond project closure. The process will involve a review of lessons learned, best practices, and outputs from previous projects, including knowledge management, land-use planning, community engagement, and gender inclusion. This review will identify effective, scalable, and culturally appropriate interventions, considering municipal knowledge networks, EDSS and KM systems, and integration of traditional knowledge into decision-making. Based on these insights, the project team will draft core strategy themes covering governance arrangements, community capacity development, gender-sensitive monitoring, financial sustainability, and alignment with local and regional development plans. Special emphasis will be placed on empowering women, youth, and local communities to sustain project benefits. Stakeholder consultations—including local authorities, community representatives, and partner institutions—will provide feedback to refine the draft, ensuring alignment with community priorities and institutional capacities. The draft will outline roles, responsibilities, timelines, and indicators, forming a practical roadmap for embedding sustainability principles and fostering long-term ownership of interventions across all project sites.

Activity 3.1.4.2: Conduct Consultations with Communities and Institutions

This activity will focus on validating and refining the draft sustainability and project exit strategy through participatory consultations with key stakeholders, ensuring the strategy is practical, inclusive, and aligned with local priorities. The process will begin by identifying and mapping critical stakeholders, including municipal authorities, local planning staff, community leaders, women's and youth groups, and relevant governmental and non-governmental organizations. This mapping will identify all actors who influence or are affected by the sustainability plan, capturing diverse perspectives, especially from local communities. Structured review sessions will then be organized, enabling stakeholders to assess institutional responsibilities, governance arrangements, resource mobilization, capacity-building needs, and mechanisms for maintaining knowledge management systems and decision-support platforms. Feedback will focus on feasibility, cultural relevance, and alignment with local development frameworks, with special emphasis on gender-responsive approaches and participation of women and youth. Collected inputs will be analyzed and integrated into the draft strategy, addressing gaps, risks, and opportunities for improved coordination. The revised strategy will then undergo formal validation, resulting in a co-owned, practical, and contextually relevant sustainability and exit plan that strengthens local ownership, accountability, and long-term, gender-responsive land management outcomes.

Activity 3.1.4.3: Integrate the sustainability and exit strategy into land use planning and EDSS

The sustainability and exit strategy will be aligned with the spatial planning data, linking sustainability objectives to mapped land-use priorities, restoration sites, and areas targeted for climate-smart interventions. This will make the recommendations— including gender-responsive approaches, community engagement protocols, and traditional knowledge considerations—spatially explicit and actionable. Following alignment, the strategy will be translated into digital modules and integrated into the EDSS platform alongside existing datasets and analytical tools. The system will be designed to support predictive modelling, scenario analysis, and evidence-based decision-making that incorporates sustainability and gender-inclusive considerations. Training and capacity-building sessions will then be conducted for local planners, municipal staff, and institutional users, including hands-on exercises to facilitate effective application of the integrated strategy. Once deployed, the updated EDSS will guide planning, restoration, and resource allocation, embedding sustainability and community ownership into operational workflows and securing long-term institutionalization of project interventions.

Activity 3.1.4.4: Build Local Capacity for Sustainability Implementation of the sustainability and exit strategy

A capacity needs assessment will first be conducted to identify gaps in technical skills, knowledge, and institutional capabilities among municipal planners, local authorities, community leaders, and other stakeholders. Based on the assessment, a tailored training programme will be developed, covering EDSS utilization, spatial planning integration, monitoring of sustainability indicators, participatory planning, and gender-responsive engagement approaches. Training materials will include manuals, case studies, hands-on exercises, and field demonstrations. Sessions will be conducted through interactive workshops and practical exercises, enabling participants to gain experience in applying the sustainability strategy within local planning frameworks and decision-support systems. Special focus will be placed on empowering women and youth to actively engage in land management decisions. Follow-up mentorship and technical support will reinforce learning, facilitate adaptive management, and enable effective operationalization of the sustainability strategy. This activity will institutionalize project interventions, strengthen local capacity, and secure long-term, gender-inclusive, and community-led sustainable land management outcomes.

Global Environmental Benefits and Adaptation Benefits

The proposed project will generate significant global environmental and adaptation benefits by enhancing the achievement of land degradation neutrality (LDN) targets in the Irano-Turanian biogeographical zone. The project area in the northern Badia, including Sama Sarhan district, Umm Al-Jemali district, Surra and Al-Khanasri rangeland reserves, and associated Key Biodiversity Areas (KBAs) in Mafraq Governorate, forms part of one of the largest continuous arid–semi-arid ecosystems in the Middle East, covering over 75–80% of Jordan. This landscape represents a globally significant biogeographical transition zone linking Mediterranean ecosystems, the Irano-Turanian steppe, and Saharo-Arabian desert systems, making it critically important for biodiversity connectivity, ecological processes, and evolutionary adaptation across dryland ecosystems. Through on-the-ground implementation and case studies in the most vulnerable and sensitive areas where site-specific restoration plans have been developed, the risks of further degradation will be mitigated, leading to more resilient and productive ecosystems. It is worth noting that the northern Badia supports over 200 plant species, including dominant steppe shrubs and dwarf shrubs such as *Artemisia herba-alba*, *Achillea fragrantissima*, *Haloxylon salicornicum*, *Atriplex halimus*, *Salsola* spp., and *Astragalus spinosus*, alongside ephemeral grasses, forbs, and halophytic vegetation. These plant communities play a critical role in stabilizing soils, supporting grazing systems, and maintaining nutrient cycling in arid ecosystems. Their restoration will therefore contribute directly to global biodiversity conservation, prevention of desertification, and maintenance of globally significant steppe ecosystems. With a robust framework for validation of land degradation and bioclimatic data, the project will contribute to the reversal of the adverse effects of land degradation.

The Badia region is also globally important for fauna, supporting nearly 50% of Jordan's mammal species, including gazelles, desert carnivores such as foxes, and ecologically important rodent populations. It hosts reptile species of global conservation concern, including *Uromastyx aegyptia* (spiny-tailed lizard), *Varanus griseus* (desert monitor), and *Chamaeleo chamaeleon*, many of which are listed under CITES. In addition, the northern Badia lies along the African–Eurasian migratory flyway and supports raptors, waterfowl linked to the Azraq Basin and wadis, and steppe bird species, with several Important Bird Areas (IBAs) and Key Biodiversity Areas (KBAs) located in the Mafraq plains. The project will therefore contribute to the protection of globally important migratory bird routes and biodiversity of international conservation significance. The project will facilitate informed decision-making to align with global objectives, ultimately resulting in the restoration and sustainable management of the Irano-Turanian zone by developing a Land Degradation Neutrality database. High-resolution land cover maps and accurate SOC data will enable targeted interventions and restoration measures which will be crucial for maintaining ecosystem services. The comprehensive stakeholder engagement approach implemented by the project will align restoration efforts with community needs and strengthen capacity, thereby creating adaptive responses to land management challenges. Restoration interventions in Surra and Al-Khanasri rangeland reserves—ecotones between major biogeographical regions characterized by mixed shrub–grass systems and variable biomass productivity—will conserve genetic resources of dryland plant species and serve as reference systems for rangeland restoration science, thereby contributing to global knowledge and large-scale restoration efforts.

The project will also generate significant climate change mitigation benefits through increased soil organic carbon (SOC) and vegetation biomass. Soils in the northern Badia, dominated by Aridisols and Entisols, are major carbon reservoirs but are currently degraded due to overgrazing, erosion, and loss of organic matter. By improving land management and restoring vegetation cover, the project will enhance carbon sequestration and contribute to global climate mitigation objectives. In addition, the project will strengthen hydrological functions in a highly water-scarce environment characterized by less than 100–200 mm of annual rainfall, high variability, and significant groundwater depletion. The northern Badia includes critical systems such as wadis and the Azraq Basin, which support migratory birds, wetland biodiversity, and vegetation hotspots. Restoration of these systems will improve water retention, recharge, and ecosystem resilience, thereby supporting biodiversity refugia and climate adaptation in arid ecosystems. The project will tackle globally relevant dryland degradation processes and prevent irreversible desertification tipping points in one of the world's most fragile ecosystems.

The project will finance the incremental costs required to generate these global environmental benefits, including biodiversity conservation, land degradation neutrality, and climate change mitigation, going beyond business-as-usual land management practices. The project will therefore deliver globally significant outcomes through restoration of steppe ecosystems, conservation of KBAs, protection of migratory species, enhancement of soil carbon stocks, and strengthening of ecosystem services, while generating replicable models for dryland restoration, rangeland governance, and climate resilience applicable across the Irano-Turanian region and other arid ecosystems worldwide. The lessons learned and best practices gained from the project will inform larger environmental policy frameworks, providing a model for future interventions that address similar landscape degradation issues globally. However, without GEF support, the critical mass of validated data, stakeholder engagement, and adaptive management strategies required for effective land restoration efforts in the Irano-Turanian zone would remain substantially underdeveloped, leading to the continued land degradation.

Stakeholder involvement and co-benefits

The success of this project is rooted in robust stakeholder involvement at every level, ensuring that diverse perspectives and localized knowledge contribute to its design and implementation. The project plan includes comprehensive consultations with various stakeholders, ranging from government agencies to local communities, with a focus on incorporating gender perspectives and

involving groups, such as women and indigenous populations. Stakeholders will be engaged in defining project parameters, co-developing land management strategies, and identifying priority areas for restoration, ensuring that the solutions are relevant, gender sensitive and culturally appropriate. Additionally, training programs will be provided to enhance stakeholders' skills in utilizing the Environmental Decision Support System (EDSS) and implementing sustainable land practices, fostering a sense of ownership and responsibility. Local communities will directly benefit from enhanced livelihoods through sustainable practices and increased participation in land management decisions, ultimately leading to improved ecosystem health and resilience. The collaborative approach not only empowers stakeholders but also fosters accountability and transparency, creating a foundation for enduring environmental benefits. The project findings will be widely disseminated, facilitating ongoing learning and adaptation in land management practices long after the project's completion. In turn, these co-benefits promote sustainable practices across the region, making community engagement a crucial pillar for translating project results into broader environmental impacts.

Knowledge Management and Learning

Knowledge management is a critical component of the project, which will enable all stakeholders to access relevant information, resources, and best practices to enhance the effectiveness of restoration and sustainable management efforts. The project's knowledge management strategy serves as an essential mechanism for generating and disseminating knowledge about sustainable land management practices, ensuring that lessons learned are documented and utilized for ongoing improvement. The strategy will outline various channels for communication, including community workshops, social media platforms, and knowledge-sharing events that cater to diverse demographics, particularly focusing on promoting the role of women and local communities in sustainable land management discussions. The project will also incorporate traditional knowledge by documenting indigenous practices and insights that have been historically effective in land management within the Irano-Turanian zone, while ensuring that women and local community traditional knowledge and roles are recognized and respected. Best practices and lessons learned will be documented with emphasis on local knowledge to empower stakeholders to contribute to land restoration efforts in the Irano-Turanian zone, the rest of Jordan as well as other areas. The project will facilitate gender responsive workshops and forums where traditional knowledge holders will share their experiences and insights, promoting intergenerational exchange and fostering respect for indigenous practices. Knowledge-sharing platforms will be used to facilitate the exchange of information at local, national, and global levels, promoting dialogue among practitioners, researchers, and policymakers. This approach will promote peer learning and enable the sharing of insights and strategies that have proven effective in their contexts while ensuring that traditional knowledge plays an integral role in shaping sustainable management practices.

Policy coherence

The project is anchored in a strong national policy landscape that increasingly promotes integrated action across sectors. The project therefore advances policy coherence by operationalizing national commitments, reducing fragmentation between sectors, and promoting mutually reinforcing actions across environmental, agricultural, water, and local governance institutions. Through integrated data systems, participatory restoration, and harmonized planning, the project will provide a coherent, cross-sectoral pathway for Jordan to achieve its LDN targets while contributing simultaneously to climate adaptation, biodiversity conservation, and sustainable rural livelihoods. As a Party to the three Rio Conventions, Jordan has made significant progress in embedding Land Degradation Neutrality (LDN) within its overarching policy frameworks, including the National Climate Change Policy (2022–2050), the National Action Programme to Combat Desertification (NAP-CD), the National Biodiversity Strategy and Action Plan (NBSAP 2025–2030), and its Nationally Determined Contributions (NDCs) (2018). These instruments collectively create a foundation for policy coherence by articulating shared objectives around climate resilience, sustainable land use, biodiversity conservation, and restoration of degraded ecosystems.

This project will strengthen linkages between ministries and agencies whose mandates intersect in the Irano-Turanian zone, particularly the Ministry of Environment (MoE), Ministry of Agriculture (MoA), Ministry of Water and Irrigation (MWI), Ministry of Local Administration (MoLA), and community-based governance structures. The Environmental Protection Law No. 6 (2017) provides the overarching legal architecture for environmental planning and soil protection, positioning the MoE as a central coordinating institution. This project's integrated monitoring systems and LDN database will directly reinforce the law's provisions for land and soil conservation. Likewise, the Agriculture Law No. 13 (2015) and the National Strategy for Agricultural Development (2016–2025) emphasize soil conservation, forest protection, rangeland management, and climate-resilient agriculture - core elements which will be addressed through the project's restoration interventions and community-driven grazing management. In addition, the project interventions will promote and implement the National Rangeland Strategy (2013/2014), which advocates for the traditional Hima system and participatory rangeland governance. The project will translate this strategy into targeted on-the-ground action in sensitive hotspots. The project will also support the National Land Use Master Plan (2006–2030) through improved land-use planning tools and an Environmental Decision Support System (EDSS), enabling better coordination of land allocations and preventing uncontrolled expansion into ecologically fragile grazing lands. In addition, there will be synergies with the National Water Strategy (2016–2025) through project activities related to restoration, efficient water use, and integrated watershed management which are critical in a water-scarce environment like the Northern Badia.

Jordan's revised NDC (2021) identifies land restoration, rangeland rehabilitation, biodiversity protection, and water management as critical adaptation pillars. The long-term Climate Change Policy (2022–2050) calls for climate integration "across all sectoral policies," a principle mirrored by the project's integrative framework that links soil carbon dynamics, land cover monitoring, and predictive modelling to climate-resilient land management. The project will therefore contribute directly to the NDC's implementation pathway by improving Monitoring, Reporting and Verification (MRV) of land-based indicators and embedding climate-smart practices. Moreover, the project's outcomes on ecosystem rehabilitation and community-driven knowledge management are zligned to Jordan's NBSAP (2025–2030) which emphasizes habitat restoration, sustainable land use, and reduced degradation pressures.

Transformativeness, Innovativeness and Scalability

This project is designed to be transformative in its approach to sustainable land management, tailored restoration and conservation interventions, leveraging innovative accurate data curation techniques, and environmental modelling to create a foundation for improved decision making and comprehensive sustainable land management in the Irano-Turanian zone. This technological integration will enable targeted restoration in degraded hotspots. In addition, the project will promote gender-inclusive decision making in land management. This is a critical transformative social change that recognizes the importance of equitable involvement in decision-making processes and sustainable land management. Through structured capacity-building initiatives, the project will develop and build the skills of stakeholders which will empower them to sustain project benefits long after its conclusion. The scaling-up potential is significant, as successful methodologies developed in the Irano-Turanian zone could serve as models for other regions facing similar challenges, facilitating a broader application of effective land management practices. The project innovations will be shared widely, fostering a culture of continuous improvement and adaptation among practitioners and policymakers. A future phase 2 of the project will aim to scale the best practices from this project to national level data validation and development of a national sustainable land management (SLM) plan. Establishing national standards and protocols for data validation will enable accurate and relevant data to inform policy and decision-making at the highest levels. The expansion to a national level will further enhance the transformative potential of the project, creating a framework for sustainable land management that can be adapted to the national context while drawing upon the lessons learned from the Irano-Turanian zone.

Assumptions and impact drivers

The effective implementation and sustainability of the proposed project will hinge upon several key assumptions. Firstly, it is essential that local communities actively engage in restoration and sustainable management practices, perceiving tangible benefits such as improved livelihoods and enhanced ecological health. Additionally, the project it is assumed that there will be a supportive governance environment, where local and national structures provide political will, enabling legislative frameworks, and necessary resource allocation for capacity building and engagement. Another critical assumption is market access and economic viability for community-based enterprises centered on sustainable rangeland products; without favorable market conditions, the economic benefits essential for sustaining engagement will not materialize. The project also presupposes climate stability for the successful recovery of native vegetation, as extreme weather conditions could impede restoration efforts. Moreover, collaboration among diverse stakeholders – governmententities, NGOs, the private sector, and local communities - will be vital for coordinated action and successful project implementation. Finally, the project assumes that promoting gender equity within governance and community engagement will yield more effective and equitable decision-making processes, addressing the diverse needs of the community.

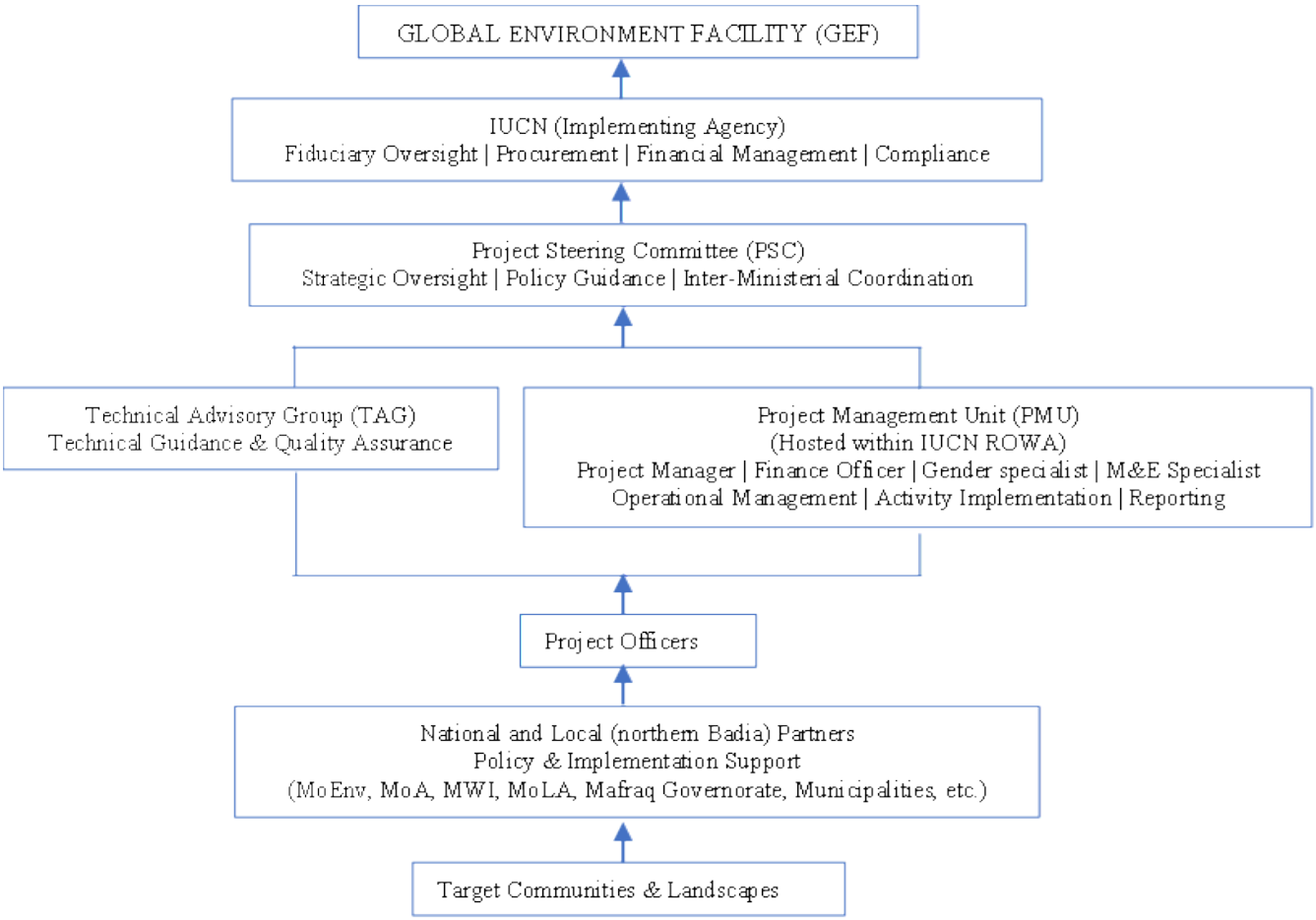
Impact drivers also play a pivotal role in shaping the success of the project. The socio-economic context in the northern Badia, including poverty rates and market access, significantly influences community engagement in sustainable practices; higher poverty levels may push individuals toward unsustainable practices for immediate survival, whereas improved economic conditions could promote a shift toward sustainability. Environmental changes, such as ongoing land degradation and biodiversity loss, pose challenges that need proactive measures to foster an enabling environment for restoration. The existing policy environment related to land management, environmental protection, and community development serves as a critical driver; supportive government policies enhance the project's success prospects, while conflicting regulations may impede progress. Community dynamics, particularly trust and collaboration, strengthen social capital, fostering resilience and collective action. Technological advancements in data collection and sustainable land management are crucial for effective decision-making and adaptive management, whereas limited access to technology could hinder outcomes. Additionally, aligning the project with national and international climate policies will create synergies that support its objectives while addressing broader environmental challenges.

[1] Enabling Elements for Good Project Design: A synthesis of STAP guidance for GEF project investment: https://stapgef.org/resources/advisory-documents/enabling-elements-good-project-design-synthesis-stap-guidance-gef

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this project, including financial management and procurement. If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

The Ministry of Environment of Jordan is the execution partner on behalf of the Government of Jordan. The IUCN will be the GEF implementing agency responsible for project oversight, supervision. The following organogram depicts the management arrangements in the project, including accountability flow and financial reporting.



The project will be implemented by the IUCN who will be responsible for the efficient and effective use of project resources and the achievement of project goal, objectives and outcomes according to the approved work plan and budget. Day-to-day operational oversight will be carried out by the Ministry of Environment (MOE).

To maximize the effectiveness, sustainability, and institutional ownership of the proposed project, a strategic approach to coordination and collaboration with relevant national, regional, and international institutions is essential. Building on existing mandates, technical expertise, governance structures, and community networks will enhance resource efficiency, strengthen knowledge exchange, and promote harmonized implementation of restoration and rangeland management interventions. This collaborative approach will enable the project to address the complex ecological, socio-economic, and governance dimensions of rangeland degradation while reinforcing national priorities and local participation. The table below outlines key institutions and their specific roles, illustrating how coordinated engagement with each will strengthen project implementation and support the achievement of sustainable land management and land degradation neutrality objectives.

Coordination with National, Regional, and International Institutions

Institution	Collaboration/Coordination Focus with Proposed Project
Ministry of Environment	As the national authority responsible for environmental policy, UNCCD commitments, and Land Degradation Neutrality targets, the proposed project will align its restoration activities, monitoring systems, and reporting frameworks with Ministry guidelines. The project will also coordinate ecological assessments, data sharing, and national reporting to align with Jordan's National Action Plan to Combat Desertification.
Ministry of Agriculture	As the lead institution for rangeland governance, the proposed project will coordinate closely with the Ministry to align interventions with the National Rangeland Strategy, grazing regulations, and reserve management systems. Joint implementation will include reseeding, shrub planting, water harvesting, and enforcement of sustainable grazing regimes through local directorates.
National Center for Agricultural Research	The project will utilize NARC's scientific expertise, field trials, and research outputs on drought-resistant forage species, soil conservation, and climate-resilient restoration technologies. Collaboration will include joint research, pilot demonstrations, and evidence-based refinement of restoration practices.
Royal Society for the Conservation of Nature	The project will draw on RSCN's experience in biodiversity monitoring, habitat restoration, and protected-area management. Their participatory conservation models will inform community-based rangeland governance, ecological monitoring protocols, and biodiversity safeguards.
Hashemite Fund for Development of the Jordan Badia	Coordination will focus on integrating livelihood development, skills training, and socio-economic empowerment initiatives into restoration activities. The project will collaborate with the Fund to enable restoration interventions to generate employment, reduce poverty, and strengthen local capacity.
Ministry of Local Administration	The proposed project will coordinate land-use planning, decentralised decision-making, and municipal engagement through this Ministry. Collaboration will support integration of restoration priorities into local development plans, strengthen governance structures, and facilitate community participation in implementation.
Badia Development and Rehabilitation Program	The project will coordinate with BDRP to align ecological restoration with socio-economic development initiatives. Synergies will include joint funding of water harvesting systems, livelihood diversification projects, and institutional coordination among ministries, municipalities, and tribal stakeholders.
Mafraq Governorate Council and municipalities including Safawi Municipality, Ruweished Municipality, and Umm Al-Jimal Municipality	Local authorities will support implementation through land-use planning, licensing, enforcement of land-clearing restrictions, and community engagement. The project will coordinate district-level platforms to integrate restoration priorities into municipal development strategies and strengthen local compliance with sustainable rangeland management practices.
Tribal leadership and Customary Institutions	The project will work with tribal institutions to incorporate customary grazing systems, conflict mediation mechanisms, and seasonal mobility practices into restoration planning. Their involvement will strengthen legitimacy, compliance, and community ownership of rangeland management measures.
Rangeland cooperatives and community-based organizations	These groups will serve as primary implementation partners for participatory grazing management, restoration works, monitoring, and enforcement of community agreements. The project will strengthen their technical capacity, governance systems, and institutional linkages with government agencies.
International partners including GEF, UNDP, FAO, ICARDA, IFAD, GIZ and World Bank	The proposed project will coordinate with these agencies to harmonize methodologies, share technical expertise and avoid duplication of efforts. Collaboration will focus on climate-resilient restoration, early warning systems, capacity building, and alignment with global commitments such as UNCCD, SDGs, and LDN targets.

Will the GEF Agency play an execution role on this project?

No

If so, please describe that role here and the justification.

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

In order to maximize the effectiveness and sustainability of the proposed project, a strategic approach to coordination and cooperation with past and ongoing initiatives is essential. Leveraging on lessons learned and best practices from existing and past projects will enhance resource efficiency, promote knowledge sharing, and foster collaboration by the proposed project. This approach will not only address the complexities of rangeland degradation but also empower local communities through inclusive practices. The table below outlines various relevant projects and their specific contributions to the proposed project, highlighting how each will enrich the overall project framework and support the achievement of sustainable land management goals.

Past or Ongoing Project	Collaboration/Coordination focus with Proposed Project
BMZ-funded Badia Restoration Program (2018 – 2023)	This project focused on addressing land degradation and land use changes in the Badia. Therefore, the proposed project will integrate vital data generated from this project into its framework for enhanced decision-making and strategic planning.
National Land Rehabilitation Program – Jordan Ministry of Environment	This national program focuses on promoting sustainable land management practices. Methodologies developed under this program will be adopted by the proposed project to align with national efforts for land rehabilitation.
EU-funded Enhancing Resilient Livelihoods and Food Security of Host Communities and Syrian Refugees in Jordan and Lebanon (2018 – 2022)	The focus of this project was on mitigating land degradation through sustainable agricultural practices. Therefore, the proposed project will utilize lessons learned from this initiative to benefit communities in the Irano-Turanian biogeographical zone, enhancing local capacity for sustainable agriculture.
GEF-funded Land Degradation Neutrality Process for Sustainable Land Management in Jordan (2019 - 2024)	This project focused on establishing frameworks for sustainable land management. The proposed project will align its strategies with national and global land management goals, ensuring coherent approaches to combat land degradation.
GEF funded Badia Ecosystem and Livelihood Project (2012- 2017)	The project supported sustainable livelihoods and enhance ecosystem services through participatory approaches in selected areas of the Jordan Badia. The proposed project will benefit from lessons in community engagement and participatory approaches, adaptive rangeland management and alternative livelihoods support, capacity building, multi-sectoral coordination, data-driven decision-making and gender and social inclusion.
GEF-funded Mainstreaming Biodiversity in the Sylvo-pastoral and Rangeland Landscapes in Al Sharah (2016 – 2022)	This project focused on mainstreaming biodiversity conservation into sustainable land management. Strategies developed in this project will be integrated into the proposed project to enhance ecosystem health and improve land productivity.
GEF-funded Healthy Ecosystems for Rangeland Development (HERD) Project (2018-2023)	The focus of this project was strengthening sustainable rangeland management and restoration practices. The proposed project will build upon lessons and best practices from this project to monitor progress and adjust strategies for effective rangeland management.
EU-funded Securing Rights and Restoring Land Project (2017 – 2022)	This project focused on empowering communities in land degradation assessments and restoration. The proposed project will enhance these efforts through coordination with local stakeholders, ensuring ongoing community leadership in restoration initiatives.
GEF-funded Mainstreaming Sustainable Land Management Practices project (2012 – 2018)	The focus of this project is generating data on land use and management practices. The proposed project will utilize this data to refine and improve land management strategies, ensuring informed decision-making.
GEF-funded Achieving land degradation neutrality targets through restoration and sustainable management of degraded land in Northern Jordan (2024 – 2028)	This project focuses on providing learning experiences for land management processes and supporting national efforts to implement LDN national targets through sustainable land management (SLM). It aims to deliver on LDN-TSP targets related to forest management, rehabilitation, and the improved productivity of rangeland and bare land in the Ajloun, Mafraq, and Irbid governorates. The newly proposed project will build on these experiences to refine its implementation strategies, focusing on the Irano-Turanian bioclimatic zone to enhance effectiveness and relevance in addressing land degradation. Synergy and complementarity will be integrated during project document preparation.

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
13000	0	0	0

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
13000	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
		Others	13,000.00	0.00			0.00		

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
750	750	0	0

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Natural grass	750.00	750.00		

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
18500	19231	0	0

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
18,000.00	18,731.00		

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
500.00	500.00		

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Document(s) that justifies the HCVF)

Title

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	0	0	0	0
Expected metric tons of CO_2e (indirect)	4812192	735172	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (indirect)	4,812,192	735,172		
Anticipated start year of accounting	2027	2027		
Duration of accounting	20	20		

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	6,000	6,000		
Male	4,000	4,000		
Total	**10,000**	**10,000**	0	**0**

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

- Indicator 3.3 Area of natural grass and woodlands under restoration: Implement restoration activities over 750 hectares of degraded rangelands sites that are located within the Irano-Turanian biogeographical zone. The interventions will be included passive restoration such as protection and active restoration such as planting of native drought-tolerant pastoral species (Artemisia spp., Achillea spp. etc). species and tree planting, establishment of seed banks of native grasses, shrubs, and other plants, and clearance of invasive plants. The 750 hectares have the potential to be restored and regain productivity, while sustaining the provision of ecosystem services and livelihoods.

- Indicator 4.1 Areas of landscapes under improved management to benefit biodiversity (Key Biodiversity Areas (KBAs): Implement activities in over 18000 hectares sustainable land management practices that benefit the biodiversity such as enhancement of habitats, water harvesting and protection. Participatory land management decision making. The project will conduct training and participatory monitoring for 20 park rangers and management staff of two rangeland reserves in the northern Badia (Surra and ALkhanasri Rangelands Reserves) to improve their skills and knowledge. In addition, engage local communities in conservation activities, such as awareness programs, training and participatory monitoring; Provide specialized training for park rangers and management staff to improve on management effectiveness. The trainings will cover a range of rangeland -related topics, including Integrated Management Planning, grazing management, sustainable rangelands management, and stakeholder engagement through participatory governance. In addition to the 18,000 hectares mentioned above, 731 hectares, which is the total area of the two reserves, will be benefit from improved management.

- Indicator 4.3 Area of landscapes under sustainable land management in production systems: Apply sustainable land management practices (SLM) such as crop-rotation, conservation tillage, water harvesting, organic fertilizer, and agroforestry over approximately 500 ha. These actions are specifically designed to return degraded agricultural ecosystems to a functional and resilient state.

- Indicator 6.1 Greenhouse gas emission mitigated in the AFOLU sector. The FAO Ex Ante carbon calculation tool was used to compute that the amount of carbon dioxide equivalents (--735,127 mtCO2) that will be sequestered by the project over a 20-year period

- Indicator 11 People benefiting from GEF-financed investments – based on the communities directly adjacent to and living within the project areas has been initially put at 10,000 (4,000 men and 6,000 women).

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	Comment: The project targets land degradation and restoration which are sensitive to climate variability, including droughts and extreme weather. Although climate impacts present a risk, they are unlikely to significantly disrupt the project. Considering regional climate patterns and the project's focus on climate-resilient approaches, the likelihood of disruptions is assessed as moderate. Mitigation: Assess potential climate impacts on project sites, considering droughts, temperature extremes, and shifting rainfall patterns. Engage climate experts to develop climate-resilient strategies. In case of unexpected climate events, the team will reassess timelines and adapt restoration practices, focusing on resilient species and addressing immediate community needs.

Environmental and Social	Moderate	Comment: Several environmental and social safeguards are triggered, including those related to indigenous peoples, biodiversity, cultural heritage, and access restrictions. While these risks are notable, they can be effectively managed through thorough assessments, strong stakeholder engagement, and targeted mitigation plans. With proper management, potential negative impacts can be minimized, justifying a moderate risk rating. Mitigation: Mitigation measures will include: participatory planning, community-based management, alignment with local development priorities, and respect for traditional institutions, adaptive restoration planning, livelihood support mechanisms, and adjustment of grazing schedules to prevent negative livelihood impacts, environmental monitoring, adaptive restoration techniques, and expert oversight
Political and Governance	Moderate	Comment: While there is currently no indication of political instability, risks such as policy shifts or land-related disputes could affect implementation. The project's dependence on government institutions and local engagement warrants a moderate risk level, assuming continued political stability. Mitigation: Build strong relationships with key political stakeholders and local governance structures to align with national policies. If political instability arises, establish alternative governance forums (e.g., local advisory committees) to continue receiving stakeholder input and sustain project progress.
INNOVATION		
Institutional and Policy	Low	Comment: The broader economic environment appears stable, and the presence of co-financing and international backing helps mitigate financial risks. Although macroeconomic shifts are always a possibility, they are unlikely to directly hinder project activities, supporting a low-risk rating. However, the ongoing war in the Middle East presents potential indirect risks, including regional economic instability, disruptions in trade and supply chains, inflationary pressures, and possible reallocation of government or donor resources towards emergency responses. Mitigation: Evaluate the economic landscape and local incentives for community involvement. If economic downturns occur, the project will pursue additional funding sources, engage local businesses for support, and prioritize cost-effective interventions that align with national economic goals. The project will adopt flexible planning approach to accommodate potential delays. It will also maintain close coordination with government, project partners and GEF to anticipate and respond to any economic or funding disruptions linked to the regional conflict.
Technological	Substantial	Comment: Restoring degraded rangelands presents technical challenges such as selecting appropriate species, managing water resources, and stabilizing soils. Inadequate baseline data or unexpected site conditions could undermine project outcomes. Given the complexity involved, the risk is rated as substantial, emphasizing the need for rigorous technical planning and adaptive management. Mitigation: Involve technical experts during the design phase to address site-specific challenges and anticipate potential

		technical difficulties, such as soil erosion or water scarcity. If technical issues arise, adapt designs based on stakeholder feedback and conduct periodic technical reviews to make necessary adjustments.
Financial and Business Model	Low	Comment: The broader economic environment appears stable, and the presence of co-financing and international backing helps mitigate financial risks. Although macroeconomic shifts are always a possibility, they are unlikely to directly hinder project activities, supporting a low-risk rating. However, the ongoing war in the Middle East presents potential indirect risks, including regional economic instability, disruptions in trade and supply chains, inflationary pressures, and possible reallocation of government or donor resources towards emergency responses. Mitigation: Evaluate the economic landscape and local incentives for community involvement. If economic downturns occur, the project will pursue additional funding sources, engage local businesses for support, and prioritize cost-effective interventions that align with national economic goals. The project will adopt flexible planning approach to accommodate potential delays. It will also maintain close coordination with government, project partners and GEF to anticipate and respond to any economic or funding disruptions linked to the regional conflict.
EXECUTION		
Capacity	Moderate	Comment: Local institutions may lack sufficient capacity for effective land management and long-term monitoring, which could impact project execution and sustainability. These capacity gaps may lead to delays or reduced quality of outcomes. This warrants a moderate risk rating. Mitigation: Assess the capacity of local institutions involved in land management and rangeland restoration. Develop targeted capacity-building initiatives. If capacity gaps emerge during implementation, increase training and mentorship opportunities for local institutions, ensuring knowledge transfer for long-term sustainability.
Fiduciary	Low	Strong financial controls and oversight mechanisms are in place, minimizing the risk of mismanagement, misuse of funds, or procurement delays. As such, the fiduciary risk is considered low. Mitigation: Establish clear financial management protocols, including capacity-building workshops for staff and stakeholders. If delays or issues arise, engage an external financial consultant to address challenges and expedite financial processes.
Stakeholder	Moderate	Comment: The project involves diverse stakeholders, including Indigenous Peoples and Local Communities (IPLCs) and other vulnerable groups. There is a moderate risk of insufficient participation or exclusion, which could result in conflict or delays. These challenges make stakeholder engagement a moderately risky but manageable area. Mitigation: Develop a robust stakeholder engagement plan that includes diverse participation methods (e.g., community meetings, workshops) and feedback mechanisms throughout the project lifecycle. If engagement proves insufficient, increase

		efforts through additional workshops, communication campaigns, and the inclusion of more local voices in decision-making.
Other	Low	Comment: The project has been designed to ensure safety through contingency planning and effective monitoring and coordination with local authorities at the governorate and district level. Current assessments suggest a low risk of regional conflict or security threats. However, continuous monitoring and preparedness measures are planned to maintain safety, supporting a low-risk classification. Mitigation: Mitigation measures will include coordination with local authorities, periodic security assessments, and contingency planning to ensure staff safety during field activities.
Overall Risk Rating	Moderate	The overall risk has been identified as Moderate.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Explain how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this. (max. 500 words, approximately 1 page)

The proposed project aims to address key challenges related to land degradation, biodiversity loss, and climate change impacts in the Irano-Turanian zone of Jordan, drawing on lessons learned from past and ongoing initiatives. Through a comprehensive approach that includes diverse stakeholders, including government, NGOs, private sector, and community-based organizations, the project will focus on sustainable land management and restoration of degraded areas in this biogeographical zone, in alignment with the objectives of the Land Degradation Neutrality (LDN) framework. The project will support a collaborative and inclusive process for addressing the drivers of land degradation, promoting sustainable land use practices, and enhancing the resilience of ecosystems in the Irano-Turanian zone. The project will contribute to the GEF-8 programming strategies by focusing on the following outcomes: 1) addressing the environmental drivers of degradation; 2) protecting important rangeland ecosystems that are critical for global biodiversity; 3) promoting policy coherence and removing barriers to effective land management; and 4) fostering a green recovery through enhanced land use practices. This project is designed in alignment with the Land Degradation Neutrality Transformative Projects and Programmes (LDN TPP) checklist, with the goal of achieving a land degradation-neutral world, particularly in Jordan's dryland ecosystems.

The project is aligned with the GEF Land Degradation focal area goals, and will therefore focus on both avoiding and reducing land degradation and reversing existing degradation. First, the project will support the implementation of sustainable land management (SLM) practices, with an emphasis on validating existing UNCCD national default data to enhance decision making for sustainable land management. This will directly contribute to enhanced land resilience, biodiversity conservation, and climate adaptation in the Irano-Turanian zone, while promoting sustainable land use. Second, the project will apply best-practice technologies to restore degraded hotspots within pilot sites. These sites will also serve as hubs for knowledge sharing and capacity-building, enabling the replication of successful restoration practices across the zone. The project's restorative efforts will be driven by an evidence-based approach, integrating advanced remote sensing and ground-truthing methods for accurate assessment and monitoring.

At the global level, the project will contribute to several key Sustainable Development Goals (SDGs), particularly those related to sustainable land management and biodiversity conservation. Specifically, the project will support SDG Target 12.2, which focuses on achieving the sustainable management and efficient use of natural resources, SDG Target 15.1, aimed at ensuring the conservation, restoration, and sustainable use of rangelands, and SDG Target 15.3, which seeks to restore degraded land and soil,

including land affected by drought and floods, striving to achieve a land degradation-neutral world. Furthermore, the project will contribute to SDG Target 15.5 by taking action to reduce the degradation of natural habitats, halt the loss of biodiversity, and protect and prevent the extinction of threatened species. The project will also directly contribute to the objectives and targets of: a) the Kunming-Montreal Global Biodiversity Framework, particularly Target 1: ensuring that all areas (including ecosystems of high ecological integrity) are under participatory integrated biodiversity planning and management processes by 2030, Target 2: ensuring that by 2030, at least 30% of degraded terrestrial, inland water, and coastal ecosystems are under effective restoration to enhance biodiversity and ecosystem functions, and Target 3: achieving land degradation neutrality by 2030.

Finally, the proposed project aligns with Jordan's national policies and priorities, addressing land degradation, biodiversity loss, and climate adaptation in the Irano-Turanian zone. It supports key frameworks, including Jordan's Vision 2025, the Environmental Protection Law No. (6) of 2017, Climate Change Bylaw No. 79 of 2019, and the Executive Program of the Economic Modernization Vision (2023-2025). The project complements the Ministry of Environment's Strategy Plan (2023-2025) and National Strategy and Action Plan to Combat Desertification (NAP). The integrated, community-focused approach will foster broad stakeholder engagement, ensuring that the outcomes align with national development strategies, particularly those related to land conservation, climate adaptation, and sustainable development. The project's emphasis on gender inclusion and capacity-building will also support long-term sustainable land management practices, empowering local communities to take an active role in managing and protecting their ecosystems.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment

We confirm that gender dimensions relevant to the project have been addressed during Project Preparation as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

1) Does the project expect to include any gender-responsive-measures to address gender gaps or promote gender equality and women's empowerment?

Yes

If the project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Yes

Improving women's participation and decision-making; and/or

Yes

Generating socio-economic benefits or services for women.

Yes

2) Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during Project Preparation as required per GEF policy, their relevant roles to project outcomes has been clearly articulated in the Project Description (Section B) and that a Stakeholder Engagement Plan has been developed before CEO endorsement**.**

Yes

Select what role civil society will play in the Project

Consulted only;

Member of Advisory Body; Contractor;

Co-financier; Yes

Member of project steering committee or equivalent decision-making body ; Yes

Executor or co-executor; Yes

Other (Please explain)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in section B project description?

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate	Medium/Moderate		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs has been provided.

Yes

Socio-economic Benefits

We confirm that the project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

The project will deliver significant and sustained socio-economic benefits that extend beyond income gains, fostering resilience, inclusion, and long-term prosperity while safeguarding the ecological integrity of the northern Badia rangelands. As already noted, communities in the northern Badia rely heavily on pastoralism and rangeland-based resources for income, food security, and social stability. However, recurrent droughts, overgrazing, and weak market integration have progressively undermined household resilience. The project will directly target the root causes of rural poverty and economic vulnerability by integrating sustainable land management with livelihood diversification and value chain development. This will increase household income derived from sustainable rangeland-based activities. The project will further enable households to enhance their productivity while maintaining ecological balance through the rehabilitation of rangelands, improved access to quality seedlings, and support for priority value chains such as forage seed, fodder production, honey, and medicinal plants,. Moreover, the establishment of a community-managed revolving fund will further improve access to finance, allowing pastoralists, women, and youth to invest in income-generating activities that were previously constrained by lack of capital. These interventions are expected to increase incomes from rangeland-based products by approximately 25 percent among supported households.

2. The project will also strengthen employment opportunities, particularly for women and youth, who face limited livelihood options by supporting producer groups, cooperatives, and small-scale processing enterprises. In so doing, the project will create jobs along the value chain, including production, aggregation, processing, packaging, and marketing. Gender-responsive approaches will enable women to gain greater access to resources, decision-making roles, and income streams, contributing to improved household welfare and social equity. In addition, enhanced rangeland productivity will increase availability of fodder for livestock, improving animal health, milk production, and meat quality which are critical components of household nutrition and income. Moreover, collective action through cooperatives at the community level will reduce conflict over scarce resources and promote social cohesion.

ANNEX A: FINANCING TABLES

GEF Financing Table

Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
IUCN	GET	Jordan	Land Degradation	LD STAR Allocation: LD-1	Grant	720,000.00	64,800.00	784,800.00
IUCN	GET	Jordan	Land Degradation	LD STAR Allocation: LD-2	Grant	1,064,862.00	95,838.00	1,160,700.00

Total GEF Resources ($)		**1,784,862.00**	**160,638.00**	**1,945,500.00**

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested?

true

PPG Amount ($)

50000

PPG Agency Fee ($)

4500

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	PPG($)	Agency Fee($)	Total PPG Funding($)
IUCN	GET	Jordan	Land Degradation	LD STAR Allocation: LD-1	20,000.00	1,800.00	21,800.00
IUCN	GET	Jordan	Land Degradation	LD STAR Allocation: LD-2	30,000.00	2,700.00	32,700.00
Total PPG Amount ($)					**50,000.00**	**4,500.00**	**54,500.00**

Please provide Justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
IUCN	GET	Jordan	Land Degradation	LD STAR Allocation	2,000,000.00
Total GEF Resources					**2,000,000.00**

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
LD-1	GET	720,000.00	5035414
LD-2	GET	1,064,862.00	7000000

Total Project Cost		**1,784,862.00**	**12,035,414.00**

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
GEF Agency	IUCN	In-kind	Recurrent expenditures	3885414
Recipient Country Government	Ministry of Environment	In-kind	Recurrent expenditures	3500000
Others	FAO	In-kind	Recurrent expenditures	4650000
Total Co-financing				**12,035,414.00**

Please describe the investment mobilized portion of the co-financing

Not Applicable

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	5/1/2026	Janie Rioux		janie.rioux@iucn.org
Project Coordinator	5/1/2026	Hui Ren	+86 13811895415	hui.ren@iucn.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFP	Position	Ministry	Date (MM/DD/YYYY)
Marwan Alrefai	Secretary General	Ministry of Planning and International and Cooperation	6/25/2025

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document.

Project Objective	Objective Level Indicators	Baseline	Mid-Term Project Targets and Monitoring Milestones	End of Project Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	Relevant SDG's Target(s) & indicators
Achieve clear improvements in land management, ecosystem health, and community capacity in the Irano–Turanian Zone, contributing to Land Degradation Neutrality (LDN)	% reduction in degraded land area in identified hotspots of the northern Badia (baseline vs. endline)	0% reduction (reference degraded area = 750 ha. identified as hotspots at project start).	– From 20 to 30% reduction in degraded area within the hotspot polygons (i.e., 400 ha of degraded land rehabilitated / showing measurable recovery – remote sensing change detection (Sentinel-2/Landsat) showing vegetation cover increase across hotspot areas (750 ha) – ground-truth survival surveys on at least 20% of restored sites; – gender-disaggregated participation logs for restoration activities.	– 100% reduction (i.e., 750 ha of hotspot area improved/recovered to acceptable ecological thresholds defined in the LDN monitoring protocol). – Final LULC change assessment showing degraded → restored transitions across 750 ha; – Survival/establishment surveys (6–12 month cohorts) showing agreed thresholds of plant cover / SOC increase; – stakeholder validation & MoE endorsement of recovery.	Time-series LULC maps (pre/post) from Sentinel-2/Landsat; Ground-truth survey reports and plot-level survival data; SOC lab reports for sample plots; Restoration progress reports and MoE validation letters.	– **Assumptions:**Access for field teams; community co-investment; adequate seedling/nursery supply; favorable seasonal conditions for planting. – **Risks**:Security/access restrictions; multi-year droughts or extreme events causing mortality; logistical failures in nursery supply; socio-cultural obstacles to participation (especially for women) unless mitigated.	SDG 15.3, Indicator 15.3.1
	Extent (ha) of land in the Northern Badia covered by climate-resilient, community-inclusive land use plans, and restored and/or under sustainable land management	0 ha explicitly covered by new climate-resilient, community-inclusive land-use plans aligned with project approach (existing plans are outdated or absent for target governorates).	– From 300 to 400 ha covered by pilot land-use plans (draft/approved at governorate pilot level); – From 300 - 400 ha restored, 250 ha under sustainable land management – Pilot plan formally adopted by 1 governorate covering ~750 ha; – stakeholder consultations completed in municipality; – gender-inclusive provisions	– 750 ha cumulatively covered by formally adopted, climate-resilient, community-inclusive land-use plans across 1 governorate (includes pilot + scale-out areas and buffer zones 750 ha restored, 500 ha ha under sustainable land management – Formal adoption by ≥2 municipalities; – GIS layers of plan boundaries & rules published; – local institutions trained for implementation/monitoring.	Adopted land-use plan documents. - GIS plan layers for each municipality (ha calculation). - Minutes from adoption & community validation workshops. - Training attendance lists and post-training evaluations.	– **Assumptions**: Governorates willing & able to adopt plans; central MoE and relevant Ministries support for harmonization; availability of cadastral/land data. – **Risks**: Institutional instability delaying adoption; competing commercial land-use pressures; low institutional capacity for implementation; disagreement with local stakeholders if consultations are insufficient.	SDG 15.1, Indicator 15.1.1 SDG 13.2, Indicator 13.2.1

			inserted in draft plan.				
	Increase in income from rangeland-based products among supported households	Limited or fragmented access to markets and finance for rangeland-based products; low household income derived from sustainable rangeland enterprises; weak value chains and limited business capacity among community groups	– Community-managed revolving fund established and operational in targeted communities. – Community groups trained in business management, financial literacy, and sustainable rangeland product value addition. – Initial rangeland-based enterprises supported and linked to pilot market opportunities. – Monitoring system established to track income changes and enterprise performance.	– Community-managed revolving fund governance structure designed and operational – At least 50% of planned beneficiary households accessing revolving fund support – At least 5 rangeland-based enterprise or cooperatives supported or established – Initial producer-buyer market linkage platforms conducted – Documented evidence of early livelihood gains among supported households (minimum 5–10% income increase in pilot groups)	– Household income from rangeland-based products increased by 10–25% among supported households – Fully functional and self-sustaining community revolving fund supporting rangeland-compatible livelihood investments – Operational and strengthened market systems with regular buyer–producer partnerships and contract supply arrangements	– **Assumptions:** Stable market demand for rangeland-based products, Continued community participation and institutional support, Adequate policy and regulatory support for sustainable rangeland enterprises – **Risks:** Market price fluctuations, Weak financial management of revolving funds, Climate variability affecting productivity, Limited private sector engagement	SDG 1.2, SDG 2.3, SDG 8.3, SDG 15.3
	Number of beneficiaries (≥50% women, ≥30% youth) reporting increased access to and use of project outputs	No beneficiaries (women & men) have yet benefitted from the project; project not yet implemented.	– From 400 - 5,000 beneficiaries (2,000 males, 3,000 females) report increased access to and practical use of project outputs (platform, guidance note, EDSS output, training)	– 10,000 beneficiaries (4,000 males, 6,000 females) report sustained access to and regular use of of project outputs (platform, guidance note, EDSS output, training)	– Baseline and endline stakeholder perception surveys (gender & age disaggregation). - KM platform analytics (registered users, sessions, downloads) disaggregated by gender/age. Training evaluation reports and follow-up use case studies.	– **Assumptions**:Adequate connectivity & platform localization (language / layout); KM products meet stakeholder needs; effective outreach to women & youth. – **Risks**: Low digital access in remote areas; cultural barriers limiting women's internet use; KM content not sufficiently tailored to user needs.	SDG 5.5, Indicator 5.5.2 SDG 13.3, Indicator 13.3.1
	Estimated greenhouse gas sequestration (tCO_2e)	No baseline data on carbon stocks or sequestration	– Initial estimates of carbon sequestration generated, At least (2,000,000 $ttCO_2e$ sequestered through project interventions	– Verified GHG mitigation (-4,372,109 tCO_2e) achieved through project restoration and SLM interventions	Carbon accounting reports	– **Assumptions**:Adequate technical and financial resources are available – **Risks**:Weather and climatic conditions may become unfavorable for restoration	SDG 15 - Target 15.3; Indicator 15.3.1

Project Outcome	Outcome level Indicators	Baseline	Mid-Term Project Targets and Monitoring Milestones	End of Project Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	Relevant SDG's Target(s) & indicators
Outcome 1.1: LDN assessment & restoration interventions driven by accurate, comprehensive, and accessible biogeographical data and models	Number of vulnerable and sensitive hotspots (covering 750 ha) identified and validated through participatory, gender-responsive multicriteria, cost-benefit, and hotspot analyses	Preliminary hotspot screening using historical MODIS and Sentinel-2 data not yet available	A total area of 750 ha will be identified as hotspots mapped and provisionally validated through participatory consultations with communities and Ministry of Environment. Satellite analysis completed; ground-truthing in 40% of hotspot sites; preliminary validation workshops conducted. ≥40 % women participants; women's priorities documented in hotspot criteria	Several hotspots covering in total 750 ha fully validated and formally endorsed by MoE and stakeholders; integrated into LDN/SLM database for planning. ≥40% women participants; women's priorities documented in hotspot criteria	Validated GIS hotspot maps; satellite analysis reports; stakeholder workshop minutes; MoE endorsement letters; hotspot GIS layers in central database	**Assumptions:** secure access to hotspot areas; MoE engagement; satellite imagery availability. **Risks**: insecurity, access restrictions, or political changes delaying MoE sign-off	SDG 15.3; Indicator 15.3.1
	Area (ha) of degraded rangeland restored through co-designed and co-implemented gender-responsive interventions	No large-scale restoration with accurate and validate datasets underway, although community-led micro-restoration (<500 ha) may exist.	400 ha under early-stage restoration (, erosion control begun, initial planting); ≥40% women in restoration committee leadership.	750 ha cumulatively restored with survival/establishment monitoring; women maintain ≥40% leadership positions in committees.	Restoration progress reports; sapling survival surveys; community workshop reports; photographic evidence; gender-disaggregated committee membership lists	**Assumptions:** community engagement and labor availability. **Risks**: drought, seedling mortality, cultural barriers limiting women's leadership unless mitigated	SDG 15.3 & SDG 2.4; Indicators 15.3.1 and 2.4.1
	Area (ha) under improved gender-responsive SLM practices, with ≥40% women participation	Existing SLM coverage not determinate but likely implemented inconsistently by previous projects with low (<20%) adoption levels.	250 ha under SLM (contour bunds, agroforestry, water harvesting); women ≥40% participants, ≥25% in decision-making roles	500 ha cumulatively under sustained SLM practices; women ≥40% participants and ≥40% in decision-making roles	Field verification surveys; SLM implementation reports; gender-disaggregated training attendance lists; before/after remote sensing imagery; case studies of institutionalized practices	**Assumptions:** SLM practices appropriate and adopted. **Risks**: climate shocks, insufficient follow-up, cultural norms limiting women's sustained involvement	SDG 2.4; Indicator 2.4.1
	Number of land-cover, SOC, and NPP datasets validated and aligned with Sentinel-2 and ground-truth	Existing datasets from MoE, FAO, UNDP cover <20**%** of Northern Badia. SOC lab data is only available for limited transects; NPP	At least 5 datasets validated; ground-truth sampling completed; SOC lab analysis delivered; national staff	10 datasets (≥90% coverage) validated with calibrated models; national staff certified in GIS/RS methods	Ground-truth datasets (GPS, soil labs); validation reports; GIS model documentation; training certificates	**Assumptions:** lab capacity and satellite imagery availability. **Risks**: lab delays, cloud cover, staff turnover	SDG 15.3.1

	for ≥90% of Northern Badia	models uncalibrated	trained in GIS/RS				
Outputs: 1.1.1. Land Degradation Neutrality in the Irano-Turanian assessed and the most vulnerable and sensitive hotspots in the identified with multicriteria analysis, cost/benefit analysis, and hotspot analysis 1.1.2. Tailor-Made gender and social inclusive restoration interventions involving local community participation implemented in the most vulnerable and sensitive hotspots in the Irano-Turanian Zone 1.1.3. Land cover dynamics, soil organic carbon content, and Net Primary Productivity (NPP) Dynamics validated in support of achieving land degradation neutrality (LDN) objectives in the Irano-Turanian Zone for sustainable land management							
Outcome 2.1: Improved land-use planning & sustainable land management in Northern Badia	Number of municipalities adopting a gender-responsive land-use planning framework integrating biodiversity, climate, and equitable resource access	Land use planning framework non-existent and endorsed in Northern Badia.	Draft framework finalized; piloted in 1 governorate; consultations completed in at least 2 municipalities; local planners trained; women actively included in stakeholder consultations	Framework formally endorsed by at least 2 municipalities and integrated into local planning protocols; gender, biodiversity, and climate resilience provisions embedded in land-use plans	Adopted land-use plan documents; governorate council resolutions; pilot evaluation reports; stakeholder consultation reports; training records; meeting minutes	**Assumptions:** governorate governments are receptive and legally empowered; **Risks**: political turnover; competing land-use pressures; weak institutional capacity for implementation	SDG 11.3.1; SDG 15.3; SDG 16.6
	Centralized GIS-based LDN/SLM database established & operational, with annual updates & access for ≥5 institutions (including gender agencies)	Scattered datasets across MoE, MoA, FAO, NGOs and other relevant institutions No unified platform or metadata system. Limited interoperability.	Prototype database established; 3 institutions onboarded and trained; datasets compiled and standardized; metadata protocols drafted	Database fully operational; ≥5 institutions have access and update annually; gender agencies actively use database	System access logs; metadata records; data update reports; user training logs; API/download reports	**Assumptions:** Ministry commits IT resources and internet connectivity is adequate; **Risks**: IT procurement / maintenance delays; reluctance to share data among agencies	SDG 17.18.1
	Number of policy/management decisions informed by EDSS integrating gender-sensitive decision-support tools	Insufficient and endorsed EDSS in use. Decision-making mainly ad hoc, based on historical practice or crisis response.	EDSS design and pilot completed; user testing conducted; 1 policy/management decision informed by pilot EDSS; government & community stakeholders trained	EDSS fully operational and used to inform ≥2 policy/management decisions (e.g., land-use zoning, restoration priority setting); training finalized and user manuals distributed	EDSS deployment logs; policy documents referencing EDSS; workshop reports; training manuals; stakeholder feedback reports	**Assumptions:** decision-makers actively use EDSS outputs; **Risks**: low uptake due to resistance; interoperability issues with existing systems	SDG 16.6 & 17.18
Outputs: 2.1.1. Responsive sustainable land use and land plan system developed and implemented in Irano-Turanian Zone 2.1.2. Accurate, validated and integrated LDN database developed and in operation 2.1.3. Environmental decision support system (EDSS) designed and implemented							
Outcome 2.2: Sustainable livelihoods and rangeland-based value chains strengthened to support adoption of sustainable land	Revolving fund legally constituted, capitalized, and operational	No community-managed revolving fund in place; limited access to inclusive finance for rangeland livelihoods.	Governance structure, eligibility criteria, and operational manual developed and validated; community committees trained in financial management;	Revolving fund fully operational, supporting at least 100 beneficiaries with strong participation of women and youth; regular monitoring and financial performance reporting in place.	Approved operational manual; training reports; fund registration documents; bank account records; loan disbursement and repayment reports;	**Assumptions:** Community willingness to participate; effective governance; timely capitalization **Risks:** risk of weak repayment or elite capture.	SDG 1, SDG 8, SDG 15, SDG 5

management practices in the Northern Badia			revolving fund legally constituted and capitalized; fund formally launched.		beneficiary records.		
	Number of functional market linkages (contracts, MoUs, or buyer agreements) established for rangeland-based products	Informal markets with weak buyer–seller linkages; limited access to formal markets and low value capture.	Market assessment conducted; producer groups strengthened; buyer–seller forums organized; at least 5 functional market linkages facilitated.	At least 10 functional market linkages(contracts/MoUs) established for rangeland-based products.	Market assessment report; signed contracts/MoUs; records of B2B meetings; buyer–producer partnership documentation.	**Assumptions:** Stable market demand; private-sector interest **Risks**: risk of price volatility and transport constraints.	SDG 8, SDG 12, SDG 15
	Number of rangeland-based product value chains developed and promoted	Value chains largely informal, underdeveloped, and not linked to SLM practices.	Participatory value chain analysis conducted; priority value chains identified; producer groups formed/strengthened; capacity building initiated.	At least 4 priority rangeland-based value chainsdeveloped and promoted with processing, storage, packaging, and private-sector engagement.	Value chain analysis report; training records; equipment provision records; partnership agreements; market promotion materials.	**Assumptions:** Producer cooperation; private-sector engagement; environmental safeguards upheld.	SDG 8, SDG 12, SDG 15, SDG 5
Outputs: 2.2.1. Community-managed revolving fund established and operational 2.2.2. Markets for rangeland-based products developed and promoted 2.2.3. Priority rangeland-based value chains developed and promoted							
Outcome 3.1: Project results promote learning, feedback & knowledge sharing	KM system, including online platform + 3 knowledge action networks operational	Insufficient KM platform for LDN/SLM in Northern Badia. Fragmented WhatsApp/Zoom groups exist. No formal knowledge networks.	KM strategy adopted; online platform launched; 2 governorate-level knowledge networks active; early analytics show engagement & women's participation	KM platform fully operational; 3 networks active; sustained engagement; women in leadership roles;≥40% women participants; ≥50% women users; women-led content featured	KM strategy document; platform analytics; network activity reports; workshop/webinar reports	**Assumptions:** digital literacy & internet access sufficient; **Risks**: low online engagement, language barriers, limited post-project resources	SDG 4.4 & 4.7, SDG 5.5, SDG 17.18
	Gender and social inclusion responsive stakeholder engagement plan enhancing participation in project activities	No formal gender-responsive engagement plan. Project not yet operational	Stakeholder engagement plan validated, adopted and operational; 50% of activities using plan; monitoring shows increased women's representation	80% of activities under validated plan; women's participation & decision-making documented	Validated stakeholder & gender plan; activity checklists; gender-disaggregated participation records; midterm evaluation	**Assumptions:** partner adoption; Risks: entrenched gender norms, budget constraints	SDG 5.5 — indicators 5.5.1 & 5.5.2
	Number of traditional land management practices documented & integrated into KM & EDSS, with women knowledge holders	Traditional practices are known but not formally documented and Widley shared.	3 practices documented; intergenerational transfer events held; women knowledge holders recorded	5 practices documented & integrated; women actively participating in documentation & knowledge transfer	TK database entries; EDSS content logs; workshop minutes; interviews	**Assumptions:** community consent to share TK; **Risks**: IP/privacy concerns, migration, misappropriation	SDG 11.4 / 15.3, SDG 17
	Gender-responsive sustainability & exit strategy	No sustainability or exit plan exists. Project	Sustainability strategy and exit plan developed, validated and	Strategy integrated into land-use plans & EDSS; local champions actively leading	Final strategy document; integration evidence;	**Assumptions:** local institutions can	SDG 5, SDG 16, SDG 17

	finalized & integrated	not yet operational	operational, local champions (including women) trained		handover agreements; capacity-building certificates	absorb responsibilities; **Risks**: post-project funding gaps, reshuffles, lack of support for women leaders	
Outputs: 3.1.1. A gender-inclusive knowledge management and communication strategy developed and tailored to project interventions, with a knowledge management platform and governorate-level knowledge action networks established and implemented 3.1.2. Stakeholder engagement plan and gender action plan for sustainable land management developed and tailored to project interventions 3.1.3. Strategy for the protection and management of traditional knowledge related to land use and resource management developed and integrated in project implementation 3.1.4. Gender responsive sustainability plan and exit strategy developed and integrated in project implementation							
Outcome M&E: Adaptive management & accountability system established	MEAL framework finalized by Year 1 & fully implemented with MTR & TE using gender-responsive analysis	No unified MEAL system for LDN exists yet. Project not yet operational	MEAL framework finalized & operational; baseline datasets established; participatory monitoring active; MTR conducted with key recommendations	MEAL fully implemented; Terminal Evaluation (TE) completed & disseminated; actions taken on MTR/TE recommendations	MEAL framework document; baseline & monitoring datasets; MTR & TE reports; dissemination materials; evidence of recommendation uptake	**Assumptions:** sufficient MEAL staffing & budget; **Risks**: data quality issues; low compliance with monitoring protocols; limited uptake of recommendations	SDG 17
	Percentage of project indicators (≥90%) tracked with gender-disaggregated data and analyzed to assess women's decision-making power, access to resources & leadership	Project not yet operational	Mid-term report showing ≥60% of project indicators producing gender-disaggregated data; early analysis on women's participation & benefits; lessons learned report showing lessons disseminated	Terminal project report showing ≥90% of project indicators with gender-disaggregated data; qualitative analysis on changes in women's decision-making, access to resources & leadership documented; lessons learned report showing lessons disseminated	Monitoring reports; gender indicator dashboards; data tables; TE gender analysis section	**Assumptions:** partners report gender-disaggregated data; tools are gender-sensitive; **Risks**: poor data quality, partner non-compliance, sensitivity reducing data completeness	SDG 5
Outputs: M&E.1. Project Monitoring and Evaluation Framework Developed and Implemented M&E.2. Project Progress Monitored and Evaluated Towards Achievement of Mid-Term Targets M&E.3. Project Progress Monitored and Evaluated Towards Achievement of Terminal Targets							

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount ($)		
	Budgeted Amount	Amount Spent To date	Amount Committed

Consultaion workshop and validation workshop and Meetings with LCs and stakholders	18,000.00	10,000.00	8,000.00
International Consultants	20,000.00	19,338.00	662.00
National Consultants and technical support	10,000.00	9,513.40	486.60
Domestic and International Travel for field study and for workshops)	2,000.00	1,176.91	823.00
Total	**50,000.00**	**40,028.31**	**9,971.60**

ANNEX E: PROJECT MAP AND COORDINATES

Please provide geo-referenced information and map where the project interventions will take place

Location Name	Latitude	Longitude	GeoName ID
Sama Sarhan district	32.280700	36.143700	247,021

Location Description:

Administrative district in Mafraq Governorate, northern Jordan Badia; semi-arid rangeland landscape with pastoral livelihoods and seasonal grazing systems.

Activity Description:

Implementation of rangeland restoration, community management, reseeding, and ecological monitoring and livelihood diversification

Location Name	Latitude	Longitude	GeoName ID
Umm Al-Jemali district	32.171800	36.185400	246,371

Location Description:

Rural district area near Umm Al-Jimal in Mafraq Governorate characterized by dryland ecosystems, low-density settlement, and agro-pastoral land use.

Activity Description:

Restoration demonstrations, community-based regulation, water harvesting, and livelihood diversification.

Location Name	Latitude	Longitude	GeoName ID
Key Biodiversity Areas	32.251170	36.001990	250,583

Location Description:

Priority conservation landscape within northern Badia representing ecologically sensitive rangeland habitats supporting biodiversity and restoration targets.

Activity Description:

Biodiversity monitoring, habitat restoration, climate-resilient vegetation establishment, and conservation management pilots.

Location Name	Latitude	Longitude	GeoName ID
Surra rangeland reserve	32.240443	36.095915	246,658

Location Description:

Designated grazing reserve landscape near Surrah in Mafraq Governorate characterized by steppe rangeland, sparse vegetation cover, and traditional pastoral use.

Activity Description:

Implementation of rotational grazing systems, reseeding of native forage species, restoration monitoring, and community-led rangeland stewardship initiatives.

Location Name	Latitude	Longitude	GeoName ID
Al-Khanasri rangeland reserve	32.240463	36.034536	250,583

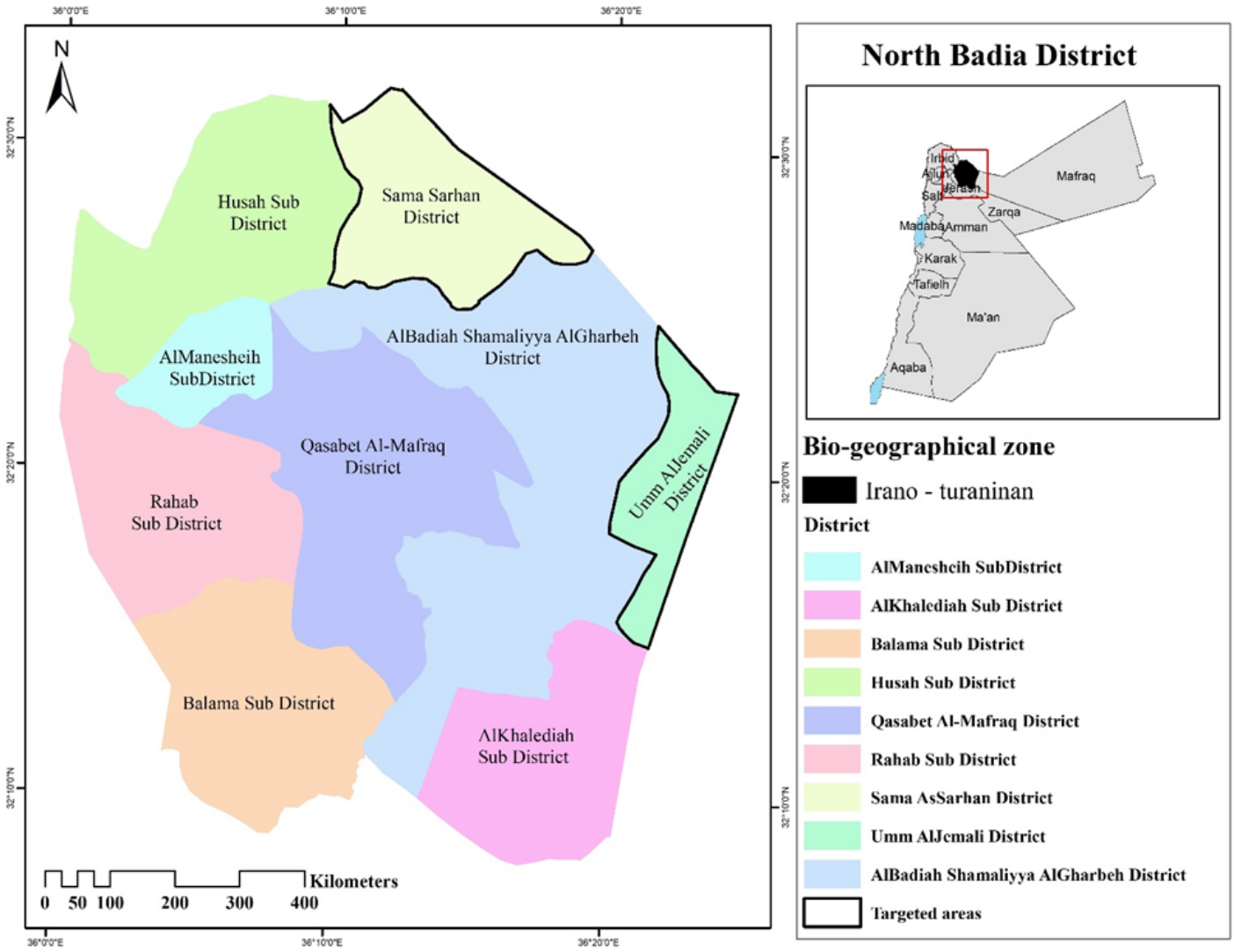
Location Description:

Semi-arid rangeland reserve area in northern Jordan steppe zone associated with the Khanāsirā locality and surrounding grazing lands.

Activity Description:

Pilot restoration interventions, controlled grazing trials, shrub planting, water harvesting demonstrations, and participatory monitoring with herder groups.

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.



Map 1. Location of the two districts of Sama Sarhan and Umm AlJemali in Mafraq governorate where project interventions will be implemented

See Appendix 21 for Map 2. Location of Surra and Al-Khanasri and rangeland reserves and Map 3 showing the location of the Key Biodiversity Area (KBA)

Geo Name ID	Location Name	Latitude	Longitude	Location Description	Activity Description
JOR-MAF-SS	Sama Sarhan district	32° 28′ 07″ N	36° 14′ 37″ E	Administrative district in Mafraq Governorate, northern Jordan Badia; semi-arid rangeland landscape with pastoral livelihoods and seasonal grazing systems.	Implementation of rangeland restoration, community management, reseeding, and ecological monitoring and livelihood diversification
JOR-MAF-UAJ	Umm Al-Jemali district	32° 17′ 18″ N	36°18′ 54″ E	Rural district area near Umm Al-Jimal in Mafraq Governorate characterized by dryland ecosystems, low-density settlement, and agro-pastoral land use.	Restoration demonstrations, community-based regulation, water harvesting, and livelihood diversification.
JOR-KBA-NB	Key Biodiversity Areas	32° 25′ 11.7″ N	36° 00′ 19.9″ E	Priority conservation landscape within northern Badia representing ecologically sensitive rangeland habitats supporting biodiversity and restoration targets.	Biodiversity monitoring, habitat restoration, climate-resilient vegetation establishment, and conservation management pilots.
JOR-MAF-SUR	Surra rangeland reserve	32° 24′ 04.43″ N	36° 09′ 59.15″ E	Designated grazing reserve landscape near Surrah in Mafraq Governorate characterized by steppe rangeland, sparse vegetation cover, and traditional pastoral use.	Implementation of rotational grazing systems, reseeding of native forage species, restoration monitoring, and community-led rangeland stewardship initiatives.
JOR-MAF-KHN	Al-Khanasri rangeland reserve	32° 24′ 04.63″ N	36° 03′ 45.36″ E	Semi-arid rangeland reserve area in northern Jordan steppe zone associated with the	Pilot restoration interventions, controlled grazing trials, shrub planting, water harvesting

				Khanāsirā locality and surrounding grazing lands.	demonstrations, and participatory monitoring with herder groups.

ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title

Appendix 25 ESFM

Appendix 14 - Gender Action Plan

Appendix 10 - ESMS-Screening-and-Clearance

ANNEX G: BUDGET TABLE

Please upload the budget table here.

Appendix 1: GEF Budget

Project Title: Promoting Sustainable Rangeland Management and Restoration Practices and Strategies to Achieve LDN in the Northern Badia of Jordan
Project ID: 11872
Executing Partner(s): Ministry of Environment and International Union for the Conservation of Nature
Project Duration: 3 years

Expenditure Category	Detailed Description	Component 1	Component 2		Component 3	Sub-Total	M&E (Component 4)	PMC	Grand Total	Responsible Entity (Executing entity receivng funds from the GEF)
		Outcome 1.1	Outcome 2.1	Outcome 2.2	Outcome 3.1					
Works										
Sum Works		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
Goods	Acquire germplasm for restoration and SLM from independent providers Activity 1.1.2.2,	120,000	0	0	0	120,000			120,000	Ministry of Environment
	Rehabilitate nursery infrastructure and supply equipment and inputs Activity 2.2.3.1, Activity 2.2.3.2	0	0	71,096	0	71,096			71,096	Ministry of Environment
Sum Goods		**120,000**	**0**	**71,096**	**0**	**191,096**	**0**	**0**	**191,096**	**Ministry of Environment**
Revolving funds/ Seed funds / Equity	Establish and operationalise community-managed revolving fund Activity 2.2.1.1, Activity 2.2.1.2, Activity 2.2.1.3, Activity 2.2.1.4			165,000		165,000			165,000	Ministry of Environment
	Develop and promote priority rangeland-based value chains Activity 2.2.2.1, Activity 2.2.2.2, Activity 2.2.2.3, Activity 2.2.2.4, Activity 2.2.4.2, Activity 2.2.4.4			50,000		50,000			50,000	Ministry of Environment
Sum Revolving funds/ Seed funds / Equity		**0**	**0**	**215,000**	**0**	**215,000**	**0**	**0**	**215,000**	**Ministry of Environment**
Sub-contract to executing partner/ entity	Conduct multicriteria analysis, cost/benefit analysis, and hotspot analysis to assess Land Degradation Neutrality Activity 1.1.1.1, Activity 1.1.1.2, Activity 1.1.1.3	25,000				25,000			25,000	Ministry of Environment

	Impemente project stakeholder engagement plan and gender action plan for sustainable land management	25,000			25,000	50,000			50,000	Ministry of Environment
	Develop and implemente ESMF and associated safeguard plans	25,000				25,000			25,000	Ministry of Environment
	Develop Site-Specific Restoration Plans with Community Input	15,000				15,000			15,000	Ministry of Environment
	Implement rangeland restoration interventions	300,000				300,000			300,000	Ministry of Environment
	Implement sustainable land management (SLM) interventions	65,000				65,000			65,000	Ministry of Environment
	Validate land cover dynamics, soil organic carbon content, and NPP Dynamics to support LDN objectives	83,000				83,000			83,000	Ministry of Environment
	Document and disseminate lessons learned and good practices				12,000	12,000			12,000	Ministry of Environment
	Facilitate private-sector engagement and inclusive business models			42,000		42,000			42,000	Ministry of Environment
Sum Sub-contract to executing partner/ entity		**538,000**	**0**	**42,000**	**37,000**	**617,000**	**0**	**0**	**617,000**	**Ministry of Environment**
Local Consultants	Develop and oprationalise accurate, validated, and integrated LDN database		47,000			47,000			47,000	Ministry of Environment
	Design and implement Environmental Decision Support System (EDSS) Activity 2.1.3.1, Activity 2.1.3.2, Activity 2.1.3.4		70,000			70,000			70,000	Ministry of Environment
	Develop a knowledge management and communication strategy, and implement community engaged knowledge management and action networks Activity 3.1.1.1 - Activity 3.1.3.3	0	0	0	70,000	70,000			70,000	Ministry of Environment
	Develop and implement a Sustainability and Exit Strategy Activity 3.1.4.1 - Activity 3.1.4.4	0	0	0	22,500	22,500			22,500	Ministry of Environment
	Develop a comprehensive project M&E framework, including baseline establishment and indicator definition Activity 4.1.1.1						5,000		5,000	Ministry of Environment
	Develop and operationalize a participatory monitoring and evaluation system (PMES) Activity 4.1.1.2, Activity 4.1.2.1						15,000		15,000	Ministry of Environment
	M&E Specialist	0				0	10,800		10,800	Ministry of Environment
	Project ESS and gender Specialist	4,000	2,400	2,400	2,000	10,800			10,800	Ministry of Environment
Sum Local Consultants		**4,000**	**119,400**	**2,400**	**94,500**	**220,300**	**30,800**	**0**	**251,100**	**Ministry of Environment**
Salary and benefits / Staff costs	Project Manager	0	0	0	0			47,159.4	47,159.4	Ministry of Environment
	Project Officer	0	0	0	0			39,127.5	39,127.5	Ministry of Environment
	Admin Assistant	0	0	0	0			14,263.8	14,263.8	Ministry of Environment
	Finance Officer	0	0	0	0			13,276.5	13,276.5	Ministry of Environment
	Procurement Officer	0	0	0	0			12,063.8	12,063.8	Ministry of Environment
	Communication Assistant	0	0	0	0			12,000	12,000	Ministry of Environment
Sum Salary and benefits / Staff costs		**0**	**0**	**0**	**0**	**0**	**0**	**137,891**	**137,891**	**Ministry of Environment**
Trainings, Workshops, Meetings	Activity 1.1.2.5: Train Local Communities (Women & Youth)	10,000	0	0	0	10,000			10,000	Ministry of Environment
	Activity 1.1.3.4. Train national staff in GIS/RS and modeling	15,000	0	0	0	15,000			15,000	Ministry of Environment
	Activity 2.1.1.4: Train Local Planners and Institutions	0	10,000			10,000			10,000	Ministry of Environment

	Activity 2.1.2.4: Train Users in Data Entry and Use	0	0	10,000		10,000			10,000	Ministry of Environment
	Activity 2.1.3.3: Train Stakeholders in EDSS Application	0	0	10,000		10,000			10,000	Ministry of Environment
	Activity 2.2.3.3: Build technical capacity in nursery management and quality control	0		10,000	15,000	25,000			25,000	Ministry of Environment
	Activity 2.2.4.3: Build capacity in processing, storage, packaging, & value addition	0		10,000		10,000			10,000	Ministry of Environment
	Activity 3.1.1.4 Organize Capacity-Building Workshops, Webinars, and Publications	0			10,000	10,000			10,000	Ministry of Environment
	Activity 1.1.1.4: Validate Findings with Stakeholders and Ministry	7,500				7,500			7,500	Ministry of Environment
	Activity 2.1.1.1: Conduct Stakeholder Consultations		5,000			5,000			5,000	Ministry of Environment
	Activity 3.1.3.2 Conduct Knowledge Transfer workshop				7,500	7,500			7,500	Ministry of Environment
	National Workshop	10,000	5,000	5,000	10,000	30,000			30,000	Ministry of Environment
	Steering Committee meetings	3,750	3,750	3,750	3,750	15,000			15,000	Ministry of Environment
	Technical Committee meetings	2,000	2,000	2,000	2,000	8,000			8,000	Ministry of Environment
Sum Trainings, Workshops, Meetings		**48,250**	**25,750**	**50,750**	**48,250**	**173,000**	**0**	**0**	**173,000**	**Ministry of Environment**
Travel	Conduct regular poject monitoring missions and project progress reviews	5,000	5,000	15,000	10,000	35,000	9,200		44,200	Ministry of Environment
	[International and national travel for staff, consultants, Experts	10,000	10,000	0	30,000	50,000			50,000	Ministry of Environment
Sum Travel		**15,000**	**15,000**	**15,000**	**40,000**	**85,000**	**9,200**	**0**	**94,200**	**Ministry of Environment**
Office Supplies	Computers, printers, equipment, Printing	5,000	5,000	2,500	2,500	15,000			15,000	Ministry of Environment
Sum Office Supplies		**5,000**	**5,000**	**2,500**	**2,500**	**15,000**	**0**	**0**	**15,000**	**Ministry of Environment**
Other Operating Costs	Publication			3,037	3,038	6,075			6,075	Ministry of Environment
	Translation	1,125	1,125	1,125	1,125	4,500			4,500	Ministry of Environment
	Commucations	1,250	1,250	1,250	1,250	5,000			5,000	Ministry of Environment
	Audit							15,000	15,000	IUCN and MOE
Sum Other Operating Costs		**2,375**	**2,375**	**5,412**	**5,413**	**15,575**	**0**	**15,000**	**30,575**	
Evaluation	Mid term Evaluation						30,000		30,000	IUCN
	Final Evaluation						30,000		30,000	IUCN
Sum Evaluation		**0**	**0**	**0**	**0**	**0**	**60,000**	**0**	**60,000**	
Grand Total		**732,625**	**167,525**	**404,158**	**227,663**	**1,531,971**	**100,000**	**152,891**	**1,784,862**	

Please explain any aspects of the budget as needed here

ANNEX I: RESPONSES TO PROJECT REVIEWS

From GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF.

Section	Secretariat's Comments	Agency's Comments

1. General Project Information / Eligibility	March 24, 2025	
a) Does the project meet the criteria for eligibility for GEF funding?	1. a) Yes, the project meet the criteria for GEF funding.	Noted with thanks
b) Is the General Project Information table correctly populated?	b) GEF Agency ID needs to be added. It is proposed to change the name of the project to the following: 'Promoting Rangeland Management Practices and Strategies to Achieve LDN in the Northern Badia of Jordan'. The new LoE is not required. A simple OFP's agreement by e-mail will be sufficient. Please note that currently the project title in Portal is slightly different than in LoE.	The Agency appreciates the proposed revision to the project title. IUCN has contacted the OFP and proposed the revised title accordingly. The OFP suggested retaining the original title, as it has already been approved by the Ministry and aligns with the country's needs.
	July 18, 2025 Noted regarding the project title. Cleared.	 Noted with thanks
2. Project Summary Does the project summary concisely describe the problem to be addressed, the project objective and the strategies to deliver the GEBs or adaptation benefits and other key expected results?	March 24, 2025 The project summary exceeds the maximum word limit of 250 words by 2.5 times. The sentences of background information may be shortened/removed in the Project Summary section (this is covered in the Project Outline, project Rationale section). The focus should be on the problem the project is trying to address, the objective the project is trying to achieve, how (components), and what the expected results (generated GEF) are.	The project summary has been revised to comply with the 250-word limit. It now concisely presents the problem the project aims to address, the objectives, the implementation components, and the expected Global Environmental Benefits (GEBs).
	July 18, 2025 Addressed. Cleared	 Noted with thanks
3 Indicative Project Overview	May 20, 2025	
3.1 a) Is the project objective presented as a concise statement and clear?	3.1 a) The statement of the project objective is concise and clear.	Noted with thanks
3.1 b) Are the components, outcomes and outputs sound, appropriate and sufficiently clear to achieve the project	b) The project components, outcomes and outputs sound appropriate and clear to achieve the project objective. However, the numbering of the outputs for Component 1 in the Indicative Project Overview table is off (2.1.1, 2.1.2, 2.1.3 instead of 1.1.1, 1.1.2 and 1.1.3).	The numbering of outputs under Component 1 in the Indicative Project Overview table has been

objective and the core indicators per the stated Theory of Change?		corrected to reflect the appropriate sequence (1.1.1, 1.1.2, 1.1.3).
	July 18, 2025 Addressed. Cleared	 Noted with thanks.
3.2 Are gender dimensions, knowledge management, and monitoring and evaluation included within the project components and appropriately funded?	May 20, 2025 June 2, 2025 It is noted that that the stakeholder engagement plan and gender action plan for SLM will be developed. The knowledge management, monitoring and evaluation included in the project components. In general, gender dimensions are integrated in the selected components of the project as appropriate, however, gender considerations should be incorporated in Component 2: Designing and Implementing an Integrated SLM Framework. In Output 3.1.1, there's a reference to "with a knowledge management platform and governorate-level knowledge action networks". Can the Agency please explain what governorate-level means?	Kindly see the revised narratives under Section B-Project Theory of Change. Gender considerations have been explicitly integrated into Component 2, emphasizing the participation of women and marginalized groups in data collection, decision-making processes, and benefit-sharing mechanisms. Additionally, gender dimensions are addressed across other components, including Stakeholder Engagement and Knowledge Management. For example, the project aims to capture gender perspectives in documenting traditional knowledge, and will promote women's participation and leadership through dedicated workshops and intergenerational forums.
	July 18, 2025 Cleared	 Noted with thanks

3.3 a) Are the components adequately funded? b) Are the GEF Project Financing and Co-Financing contributions to PMC proportional? c) Is the PMC equal to or below 5% of the total GEF grant for FSPs or 10% for MSPs? If the requested PMC is above the caps, has an exception (e.g. for regional projects) been sufficiently substantiated?	May 20, 2025 3.3 a) Yes.	Noted with thanks
4 Project Outline A. Project Rationale		
4.1 SITUATION ANALYSIS	May 20, 2025	
a) is the current situation (including global environmental problems, key contextual drivers of environmental degradation, climate vulnerability) clearly and adequately described from a systems perspective? b) Are the key barriers and enablers identified?	YES.	Noted with thanks
4.2 JUSTIFICATION FOR PROJECT		
a) Is there an indication of why the project approach has been selected over other potential options? b) Does it ensure resilience to future changes in the drivers? c) Is there a description of how the GEF alternative will build on ongoing/previous investments (GEF and non-GEF), lessons and experiences in the country/region?	May 20, 2024 YES. In addition, I suggest to consult the completion report for the GEF financed World Bank project 'Badia Ecosystem and Livelihoods' (https://www.thegef.org/projectsoperations/projects/5026) to make sure that all systematic drivers are considers and the project builds on the previous GEF investment.	We appreciate the recommendation to consult the completion report for the World Bank-GEF 'Badia Ecosystem and Livelihoods' project. Corresponding information from the project has been added under the section of “Coordination and Cooperation with Ongoing Initiatives and Projects” in the PIF. The proposed intervention

d) are the relevant stakeholders and their roles adequately described?		under this new proposed project draws extensively on lessons from previous GEF and non-GEF investments in the region, particularly in community engagement, remote sensing, sustainable land management, and gender mainstreaming. We have included lessons from the World Bank project. These lessons have informed our inclusive, ecosystem-based approach and adaptive project design. Relevant content is integrated throughout the proposal, particularly in the sections on Project Rationale, Lessons Learned, Approach/Methodology, Stakeholder Engagement, Gender Mainstreaming, and Monitoring and Knowledge Sharing.
	July 18, 2025 Noted. Cleared	 Noted with thanks
5 B. Project Description		
5.1 THEORY OF CHANGE a) Is there a concise theory of change that describes the project logic, including how the project design elements will contribute to the objective, the expected causal pathways, and the	May 20, 2025 In general YES. Please, ensure that the outcome indicators stated in the project summary are consistent and reflected in the project component deliverables and are evident through the theory of change. For example, Component 1 -Developing LDN assessment and implementing tailored restoration interventions in Irano-Turanian biogeographical zone details that 750 hectares of degraded rangeland sites will be restored (indicator 3.3), over 500 hectares of agricultural lands will be improved (indicator 3.1), and over 18,000 hectares of key biodiversity areas (KBAs) will have SLM activities under implementation (indicator 4.1).	The IA has aligned all target figures under relevant GEF indicators in the project summary and project component deliverables for clarity and consistency.

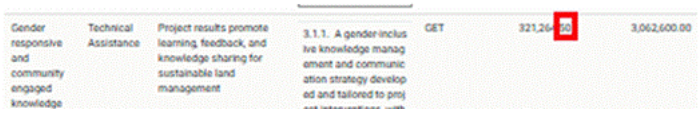
key assumptions underlying these? b) Are the key outputs of each component defined (where possible)?	However, Project summary pictures different results (except 500 ha). In addition, there is no mention of the Dana Biosphere Reserve in the Project Description, however, there is 13,000 ha added under 1.2 Terrestrial Protected Areas Under Improved Management indicator. Some ha need to be added under the indicator 4.3 Area of landscapes under sustainable land management in production systems? to ensure that the component 1 activities and outputs are aligned. Please attach the tool calculating the Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) (Indicator 6.2) under the Indicator 6 GHG Mitigated.	The Dana Biosphere Reserve has now been included in the Project Description under Components 1 and 4. With respect to addition of more hectares under Indicator 4.3, the project is focus on improving land management to benefit biodiversity (Indicator 4.1) rather than improving land management for production systems (indicator 4.3). Regarding emissions, the Ex-ACT tool used for calculating carbon sequestration (Indicator 6.1) has been uploaded. Please note that the project is reporting under AFOLU (Indicator 6.1), not under emissions avoided outside the AFOLU sector (Indicator 6.2).
	July 18, 2025 It is noticed that the results are consistent across the project summary, project descriptions (under component outputs), and the results. However, based on the description of 500 ha of agricultural land and the type of activity (SLM, not restoration), this result should be reflected in indicator 4.3‘Area of landscapes under SLM in production systems. The same applies to the 18,000 ha – currently considered as area of landscapes under SLM in production systems (4.3) (silvopasture/grassland). Only one reference indicates that this landscape can be classified as a protected area (KBA) (data from the Royal Geographic Centre of Jordan). The KBA will need to be justified during the PPG.	Thank you for your kind comments. Adjustments have been made accordingly. Please find the revisions in the following sections: (i) Project Summary (ii) Narrative under Component

		1 in Section B: Project Theory of Change (iii) Core Indicator 4.3 On the issue, of KBA, we concur with the reviewer and will justify the KBA during PPG
5.2 INCREMENTAL/ADDITIONAL COST REASONING Is the incremental/additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?		
5.3 IMPLEMENTATION FRAMEWORK a) Is the institutional setting, including potential executing partners, outlined and a rationale provided? b) Comments to proposed agency execution support (if agency expects to request exception). c) is there a description of potential coordination and cooperation with ongoing GEF-financed projects/programs and other bilateral/multilateral initiatives in the project area d) are the proposed elements to capture and disseminate knowledge and learning outputs and strategic communication adequately described?	May 20, 2025 YES. It is noted that the LDN database will be developed and put into operation. Please confirm who will manage and maintain the database after the project is completed.	The LDN database will be maintained by the Ministry of Environment. This has been clarified under Component 2 of the proposal.
	July 18, 2025 Noted. Cleared	Noted with thanks

5.4 a) Are the identified core indicators calculated using the methodology included in the corresponding Guidelines (GEF/C.54/11/Rev.01)? b) Are the project?s indicative targeted contributions to GEBs (measured through core indicators)/adaptation benefits reasonable and achievable?	May 20, 2025 Please clarify for Indicator 1, indicator 4 and indicator 6. The value added for indicator 1.2 (13,000) was not discussed in the project description, etc. Some ha need to be added under the indicator 4.3. Please attach a tool calculating emissions avoided under the indicator 6.2.	Thank you for your comment. Please see the updated PIF where the value for indicator 1.2 has been included in the Project Description of the PIF with respect to the Dana Biosphere Reserve under component 1 and component 4. The IA appreciate the reviewer's suggestion to include targets for indicator 4.3 while under GEF Indicator 4, the project specifically focus on sustainable practices that benefit biodiversity (sub-indicator 4.1) The Ex-Act tool which was used for calculating carbon sequestration (Indicator 6.1) has been uploaded. Please note that the project will working with emissions in the AFOLU (indicator 6.1) rather than outside the AFOLU sector (indicator 6.2)
	July 18, 2025 Please note that based on the description of 500 ha of agricultural land and the type of activity (SLM), this result fits under the indicator 4.3 'Area of landscapes under SLM in production systems. The same applies to the 18,000 ha – currently considered as area of landscapes under SLM in production systems (4.3) (silvopasture/grassland). Only one reference indicates that this landscape can be classified as a protected area (KBA) (data from the Royal Geographic Centre of Jordan). The KBA will need to be justified during the PPG.	Thank you for your kind comments. Adjustments have been made accordingly. Please find the revisions in the following sections: (i) Project Summary

		(ii) Narrative under Component 1 in Section B: Project Theory of Change (iii) Core Indicator 4.3 On the issue, of KBA, we concur with the reviewer and will justify the KBA during PPG
5.5 NGI Only: Is there a justification of financial structure and use of financial instrument with concessionality levels?		
5.6 RISKS a) Is there a well-articulated assessment of risk and identification of mitigation measures under each relevant risk category? b) Is the rating provided reflecting the residual risk to the likely achievement of intended outcomes after accounting for the expected implementation of mitigation measures? c) Are environmental and social risks, impacts and management measures adequately screened and rated at this stage and consistent with requirements set out in SD/PL/03?	June 2, 2025 It is noted that the agency has identified a low risk for stakeholder engagement but considering the barriers and challenges described in project description this rating may need to be revised. Please detail further and summarize risks related to stakeholder engagement in the risk table in the portal, as well as project plans to address these in project development and implementation. It is noted that in the risk table in the portal, agency has indicated a “low” risk rating on environmental and social but a “moderate” overall risk rating for the project. In addition, the risk rating in the attached preliminary ESMS screening is moderate. Please adjust the rating under the “Environmental and Social” risk category in line with the ESS risk category. The ratings are not in line as is. Doing so would be in line with the description of the “Environmental and Social” risk category in Annex B of the GEF Risk Appetite document (GEF/C.66/13) stating that: “The rating reported by project under this category is identical to the Overall Safeguards Risk rating provided at PIF, CEO Endorsement, MTR and TE stage”.	The risk rating for Stakeholder Engagement is marked as “Moderate”. Additionally, the Environmental and Social risk rating in the Risk Table has been adjusted to “Moderate” for consistency with the preliminary ESMS screening. We have also included comments to indicate the rationale for the risk levels shown. These changes align with GEF guidelines (GEF/C.66/13) and are reflected in the updated Risk Table.
	July 18, 2025 Comments are addressed. Cleared	Noted with thanks
5.7 Qualitative assessment a) Does the project intend to be well integrated, durable, and transformative?		

b) Is there potential for innovation and scaling-up? c) Will the project contribute to an improved alignment of national policies (policy coherence)?		
	July 18, 2025 Yes to a) - c)	Noted with thanks
6 C. Alignment with GEF-8 Programming Strategies and Country/Regional Priorities 6.1 Is the project adequately aligned with focal area and integrated program strategies and objectives, and/or adaptation priorities?	May 20, 2025 YES.	Cleared
6.2 Is the project alignment/coherent with country and regional priorities, policies, strategies and plans (including those related to the MEAs and to relevant sectors)	May 20, 2025 YES.	Cleared
6.3 For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e. BD, CC or LD), does the project clearly identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and how it contributes to the identified target(s)?	July 18, 2025 The project will contribute to targets 1 and 2 of the Kunming-Montreal GBF.	Thank you. This is well noted.
7 D. Policy Requirements 7.1 Is the Policy Requirements section completed? 7.2 Is a list of stakeholders consulted during PIF development, including dates of these consultations, provided?	June 2, 2025 The project rationale section in the portal refer ' Prospective stakeholders are detailed in Annex G'. This annex is not included in the attachments and please ask agency to clarify.	Annex G has been included in the PIF MSWord document and uploaded to the portal.

	July 18, 2025 The prospective stakeholder list is attached now. Cleared. The dates of consultations with stakeholders are not provided. Please note the consultation dates with all the stakeholders during the PPG stage.	Please refer to section D. Policy requirements from the PIF where the date of consultations has been captured.
8 Annexes Annex A: Financing Tables 8.1 Is the proposed GEF financing (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply): STAR allocation?	June 2, 2025 Yes. Please remove the cents from the Indicative project Overview Table.  Gender responsive and community engaged knowledge | Technical Assistance | Project results promote learning, feedback, and knowledge sharing for sustainable land management | 3.1.1. A gender-inclusive knowledge management and communication strategy developed and tailored to proj | GET | 321,26[illegible] | 3,062,600.00	The cents have been removed from the Indicative Project Overview Table as requested
8.2 Is the PPG requested within the allowable cap (per size of project)? If requested, has an exception (e.g. for regional projects) been sufficiently substantiated?	July 18, 2025 Yes.	Noted with thanks
8.3 Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines?	June 2, 2025 Please note, that grants are normally categorized as investment mobilized. Please revise the 'recurrent expenditures' to 'investment mobilized' where 'Type of Co-financing' is indicated as 'grant', in the Indicative Co-financing Table in the Annex A: Financing Tables.  Recipient Country Government | Ministry of Environment | Grant | Recurrent expenditures | 7,000,000.00	We have revised the "Type of Co-financing" from "Recurrent Expenditures" to "Investment Mobilized" where applicable, in accordance with GEF co-financing policy guidelines.
	July 18, 2025 Addressed. Cleared.	Noted with thanks
Annex B: Endorsements 8.4 Has the project been endorsed by the country's(ies) GEF OFP and has the OFP at the time of PIF submission name and position been checked against the GEF database?	June 2, 2025 Please note that the Project Title in Portal is slightly different than in the LoE. Please follow comment b) in section 1) General Project Information to address this issue. However, you may require a new LoE due to discrepancies in the financing amounts stated in the LoE and on the portal. Figures in Portal (General Project Information Table and GEF Financing Tables) for the GEF Financing ($1,784,862) is higher than in LoE ($1,776,848). Please either reduce the figures in Portal to match those in LoE. Otherwise, you need a new LoE (consistent title and financing).	The project title has been updated in the Portal. Regarding the discrepancy in financing amounts between the LoE and the Portal ($1,776,848 vs. $1,784,862), an updated LoE has been obtained from the OFP and

		uploaded in the portal.
	July 18, 2025 The GEF financing tables contains some cents. The LoE might need to be replaced again.	*TBD*
8.5 For NGI projects (which may not require LoEs), has the Agency informed the OFP(s) of the project to be submitted?		
Annex C: Project Location 8.6 Is there preliminary georeferenced information and a map of the project's intended location?	June 2, 2025 Yes, but not very specific.	We recognize the importance of providing detailed georeferenced project locations. Specific site selection will be finalized during the PPG phase in close consultation with stakeholders. Final coordinates and maps will be included in the full project document.
Annex D: Safeguards Screen and Rating 8.7 If there are safeguard screening documents or other ESS documents prepared, have these been uploaded to the GEF Portal?	June 2, 2025 Please see comments on ESS Risk category.	The ESS risk rating has been adjusted to ensure consistency across the Risk Table, ESMS screening, and GEF Risk Appetite guidelines. The updated rating is reflected in the portal.
	July 18, 2025 Cleared.	Noted with thanks
Annex E: Rio Markers 8.8 Are the Rio Markers for CCM, CCA, BD and LD correctly selected, if applicable?	July 18, 2025, YES	
Annex F: Taxonomy Worksheet 8.9 Is the project properly tagged with the appropriate keywords?	July 18, 2025, YES	Noted with thanks

Annex G: NGI Relevant Annexes 8.10 Does the project provide sufficient detail (indicative term sheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table to assess the project capacity of generating reflows? If not, please provide comments. Is the Partner Agency eligible to administer concessional finance? If not, please provide comments.		
9 GEFSEC Decision 9.1 Is the PIF and PPG (if requested) recommended for technical clearance?		
9.2 Additional Comments to be considered by the Agency at the time of CEO Endorsement/Approval	June 2, 2025 Please ensure to include relevant gender-specific indicators in the Results Framework, based on the gender analysis and the Gender Action Plan to be developed. Under M&E, please reflect that reports submitted (MTR and TE) include gender-specific results and progress in the implementation of the Gender Action Plan.	We confirm that gender-specific indicators will be integrated into the Results Framework at the CEO Endorsement stage, guided by the gender analysis and finalized Gender Action Plan. Under Component 4 (Monitoring, Evaluation, Accountability, and Learning), the PIF has included provisions that ensure Mid-Term Review (MTR) and Terminal Evaluation (TE) reports will track and report on gender-specific outcomes and

		progress toward implementation of the Gender Action Plan.
	In Portal the Agency (IUCN) responded “Yes” to the question “Does the GEF Agency expect to play an execution role on this project?”. However, at this early stage, it is too premature to decide whether the dual execution is appropriate. Once the Agency has sufficiently progressed in project preparation and if it anticipates a need for Agency execution, the Agency must submit full information and justification for a request for policy exception.	The IA agrees with the reviewer that it is premature to determine the execution role at this stage. The IA will revisit this issue during project preparation and, if necessary, will submit support letter with full justification for agency execution in accordance with GEF policies.
	July 18, 2025 At PIF stage, Agency (‘dual’) execution should not be included in the Agency's proposal. Once the Agency has sufficiently progressed in project preparation and if it anticipates a need for Agency execution, the Agency would submit full information and justification for a request for policy exception. The request is not aligned with the policy amendment approved by the Council at its 69th meeting (Annex III page 14: https://www.thegef.org/sites/default/files/documents/2025-05/EN_GEF_C.69.12_Policy%20Amendments%20to%20Streamline%20the%20GEF%20Project%20Cycle-May%205.pdf). Any proposed change inexecution arrangement must follow current GEF policy and any relevant guidance from the GEF Secretariat available at the time of such proposals	The corresponding adjustment has been made under **Section B –** *Coordination and Cooperation with Ongoing Initiatives and Projects*. A detailed implementation arrangement will be developed at the PPG stage, in response to a specific request from the Ministry of Environment of Jordan regarding access to IUCN’s technical support services for project execution.