Project Identification Form (PIF) entry – Full Sized Project – GEF - 7

Integrated forest and biodiversity management for sustainable development in the Biban mountain range

Part I: Project Information

GEF ID
10170

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
- ☐ CBIT
- ☐ NGI

Project Title
Integrated forest and biodiversity management for sustainable development in the Biban mountain range

Countries
Algeria

Agency(ies)
FAO

Other Executing Partner(s)
Ministry for Environment and Renewable Energy (MEER)

Executing Partner Type
Government

GEF Focal Area
Multi Focal Area

Taxonomy
Protected Areas and Landscapes, Biodiversity, Focal Areas, Land Degradation, Sustainable Land Management, Sustainable Forest, Sustainable Agriculture, Community-Based Natural Resource Management, Income Generating Activities, Community Based Natural Resource Mngt, Productive Landscapes, Mainstreaming, Tourism, Agriculture and agrobiodiversity, Influencing models, Strengthen institutional capacity and decision-making, Stakeholders, Private Sector, SMEs, Civil Society, Community Based Organization, Non-Governmental Organization, Type of Engagement, Partnership, Participation, Beneficiaries, Communications, Awareness Raising, Behavior change, Local Communities, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Gender results areas, Access to benefits and services, Capacity, Knowledge and Research, Capacity Development

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 1

Climate Change Adaptation
Climate Change Adaptation 1

Duration
48 In Months

Agency Fee($)
313,240

Submission Date
4/4/2019

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount($)	Co-Fin Amount($)
BD-1-1	GET	1,472,717	11,200,000
LD-1-1	GET	1,277,180	9,400,000
LD-1-4	GET	547,363	6,082,155
	Total Project Cost ($)	**3,297,260**	**26,682,155**

B. Indicative Project description summary

Project Objective

To conserve and sustainably use biodiversity and forest ecosystems, and improve the management of natural resources of the Biban mountain range Indicators: 1. Area of landscapes under improved management to benefit biodiversity; Target: 32,000 hectares 2. 19,500 individuals adopting sustainable, nature-based income-generating activities (50% women)

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount($)	Co-Fin Amount($)
Component 1: Biodiversity and land management planning, policy strengthening and financial capacity building for Sustainable Forest and Land Management in the Biban mountain range.	Investment	Outcome 1.1: Biodiversity conservation and sustainable land management are integrated into communal development plans and budgeted for in Ighil Ali and Teniet En Nasr communes Indicator 1: Number of government staff from the central to the local level trained on biodiversity monitoring and land-use planning for sustainable land, forest and biodiversity management	Output 1.1.1 Training sessions organized for government staff including technical staff, decision makers, and key officials and influencers on biodiversity assessments and ongoing monitoring, on how to prioritise specific interventions and landscapes for biodiversity conservation and ecosystem functioning, and on land-use planning, in Ighil Ali and Teniet En Nasr communes, and at the central level Output 1.1.2 Knowledge gaps addressed through supporting government staff in completing the inventory of fauna and flora species, and mapping of biodiversity, ecosystems, threats and levels of degradation in the Biban mountain range Output 1.1.3 Social, economic and cultural value of biodiversity, land and ecosystems in the Biban mountain	GET	380,000	2,859,000

Target 1: At least 100 government staff.	range assessed by government staff using a participatory approach
Indicator 2: Number of Communal Development Plans that address biodiversity and land degradation concerns developed and implementation initiated Target 2: Two Communal Development Plans that address biodiversity and land degradation concerns	Output 1.1.4 Two 'Biodiversity and Land Management Plans' – one from each commune – with zoning exercise, detailed action plan, and Gender-balanced Implementation Committee, developed by local communities with support from government official, and implementation initiated Output 1.1.5 Gap analysis of the investment plans for the Communal Development Plans, identification of financial opportunities to fund the Biodiversity and Land Management Plans, and mobilisation of these funds through advocacy. Output 1.1.6 Two legislative documents with protocols to support the implementation of the Biodiversity and Land Management Plans Output 1.1.7 Opportunities for the creation of one or several Protected Areas identified towards supporting ecotourism and creating spatial continuity with Djurdjura, Gouraya and/or Babors National Parks, and consultative and legal processes towards the Protected Area creation process initiated if appropriate

Component 2: Adoption of sustainable sources of income that contribute to conserving biodiversity and reversing land degradation by local resource users in the targeted communes	Investment	Outcome 2.1 Nature-based sustainable businesses in Ighil Ali and Teniet En Nasr communes are developed and are directly contributing to the conservation of biodiversity, forest ecosystems and land Indicator: # of sustainable Micro Small and Medium Enterprises (MSMEs) generating profit established including for women and youth Target: at least 25 MSMEs established in each commune	Output 2.1.1 A government-based technical support team established to assist, monitor and enable the maintenance of the sustainable income-generating activities to be developed and implemented under Outputs 2.1.2 and 2.1.3 Output 2.1.2 At least 100 Sustainable business plans in agroecology, agritourism, ecotourism, handcrafting, forestry, NTFP value chains or other economic activities developed in alignment with the Biodiversity and Land Management Plans and zones (Output 1.1.4) Output 2.1.3 At least 50 MSMEs that are generating income and contributing to biodiversity, ecosystems and land conservation established	GET	2,010,248	20,381,355
Component 3 : Replicating and upscaling of successful interventions across the Biban mountain range	Technical Assistance	Outcome 3.1 Sustainable land management and biodiversity conservation integrated in development planning across the Biban mountain range	Output 3.1.1 An intercommunal Biban mountain range Biodiversity Platform including public and private sector actors established to promote biodiversity and ecosystems conservation, and support access to financial sources for the replication of good practices	GET	750,000	2,025,800

Indicator 1: Sustainable land management, biodiversity and ecosystem service values integrated into sector and development policy documents and planning processes across the Biban mountain range Target 1: SLM and BD guidelines endorsed by planners and officials for integration into at least 2 policy documents and 2 communal development plans in the Biban Indicator 2: Additional private and public resources mobilized for the upscaling of sustainable land management and biodiversity conservation practices Target 2: X$ (To be determined during PPG)	Output 3.1.2 Amendments to policies, strategies and plans proposed to enable and promote integrated, participatory, landscape-scale development planning, and sustainable land management and biodiversity conservation in the targeted Wilayas and at the national level Output 3.1.3 Awareness-raising campaigns implemented for the general population across the Biban mountain range including women and youth on the importance of biodiversity and forest ecosystems, land degradation and other threats Output 3.1.4 Guidelines on best approaches and practices for sustainable development and biodiversity, forests and land conservation in the Biban mountain range developed and disseminated Output 3.1.5 Public and private resource mobilisation strategy developed and implementation initiated to upscale successful practices for the sustainable management of biodiversity, forests and land within the Biban mountain range 3.2.1 Project Monitoring & Evaluation plan developed and implemented.

	Outcome 3.2: Project monitored, results captured and lessons learnt widely disseminated. Indicator: An M&E plan and a communication strategy developed and implemented Target: 1 M&E Plan, 1 Strategy	3.2.2 Project Mid-term and Final Evaluations undertaken. 3.2.3 A Communication Strategy developed and implemented.		
		Sub Total ($)	**3,140,248**	**25,266,155**
Project Management Cost (PMC)				
		GET	157,012	1,416,000
		Sub Total($)	**157,012**	**1,416,000**
		Total Project Cost($)	**3,297,260**	**26,682,155**

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Government	Ministry of Environment and Renewable Energy	Grant	Investment mobilized	11,876,155
Government	Ministry of Agriculture, Rural Development and Fisheries (INRF and INRAA)	Grant	Investment mobilized	12,584,000
Government	Ministry of Agriculture, Rural Development and Fisheries (INRF and INRAA)	Grant	Investment mobilized	1,416,000
GEF Agency	FAO	Grant	Investment mobilized	806,000
			Total Project Cost($)	**26,682,155**

Describe how any "Investment Mobilized" was identified

Aligned with the Cofinancing guidelines, the investment mobilised comprises all relevant investments by project partners in the Biban Mountain Range that are not operating or operational costs. Details are provided below on the nature of the investments.

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	Algeria	Biodiversity	BD STAR Allocation	1,472,717	139,908	1,612,625
FAO	GET	Algeria	Land Degradation	LD STAR Allocation	1,824,543	173,332	1,997,875
				Total GEF Resources($)	**3,297,260**	**313,240**	**3,610,500**

E. Project Preparation Grant (PPG)

PPG Amount ($)

100,000

PPG Agency Fee ($)

9,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	Algeria	Biodiversity	BD STAR Allocation	25,000	2,375	**27,375**
FAO	GET	Algeria	Land Degradation	LD STAR Allocation	75,000	7,125	**82,125**
				Total Project Costs($)	**100,000**	**9,500**	**109,500**

Core Indicators

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)
32000.00	0.00	0.00	0.00

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)
16,000.00			

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

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)
16,000.00			

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

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

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	9,750			
Male	9,750			
Total	19500	0	0	0

Part II. Project Justification

1a. Project Description

1) Global environmental problems, root causes and barriers that need to be addressed

The area of intervention: the Biban mountain range

Algeria is a North African country bordering the Mediterranean Sea. Its total land area is slightly over 2.3 million km^2. Algeria achieved independence in 1962 after more than a century of occupation by France. During the 1990's, widespread terrorist activities in villages and rural areas led large sections of the rural population to abandon rural areas and seek security in large towns and cities. The security situation has stabilized since the late 1990s and the Government has progressively promoted a policy of encouraging the population to return to rural areas and small villages. From the early 2000's the country benefitted from high oil revenues, enabling the financing of rural development schemes. However, since 2014, declining oil prices have led to declining revenues, and there are now fewer government funds to subsidize rural development and less direct support to the population. This has led the Government to develop the '*New Economic Growth Model*' which promotes the convergence of economic transition and ecological transition, integrated ecosystem management, the conservation of traditional knowledge on natural resources, and encourages the creation of value added and the sustainable management of ecosystems' goods and services (e.g. pharmacologic, cosmetic, agroforestry products)[1].

The forests of northern Algeria provide a range of environmental goods and services – which are locally and globally significant. These include: habitat, water conservation, soil conservation and carbon retention. These also include the provision of food, medicine, construction material, energy, recreational value, cultural goods and the conservation of biodiversity. They also provide a mechanism for humans and other species to adapt to climate change. The Biban mountain range is a chain of mountains in northern Algeria. It is a sub-chain of the Tell or Algerian Atlas. The range covers approximately two-thirds of the following three Wilayas: Bouira, Bejaia and Bordj-Bou-Arreridj[2] (see Figure 1).

Figure 1: Approximate location of the Biban mountain range in the north of Algeria.

Overall, the Biban mountain range covers approximately 2,500 km^2 and the highest point is Mount Mansoura at 1,862 m. The Biban mountain range is also characterized by having very sharp relief[3]. The vast majority of the Biban mountain range lies in the mid-mountain zone, with 38% lying between 400 and 800 m altitude and 55.5% lying between 800 and 1,200 m altitude (0,5% below 400 m and 6% above 1,200 m). The total population in the Biban mountain range is estimated at 106,372 (2008 figures, see BNEDER, 2008) with a growth rate of 0.4%. The principal activities are agriculture and forestry (i.e. 46% of agricultural land, 39% of forest land, 13% of rangeland).

Agriculture covers approximately 113,000 hectares and the principal agricultural products are cereals and olives. The total forest cover is approximately 100,000 hectares. The main forest ecosystems are Aleppo Pine and Holm Oak. Livestock raising also plays an important role in the local economy, with notably sheep accounting for approximately 68% of livestock. In addition, the population of the Biban mountain range grows a very large number of fruit, vegetables, nuts and cereals. Finally, the collection of Non-Timber Forest Products (NFTP) is traditionally a key economic activity – this includes honey, mushrooms, acorns and many medicinal and aromatic plants (e.g. carob, rosemary, thyme). This continues to play an important role in the economy as well as in the local culture. Most communes in the range are classified as 'rural poor communes'[4]. The Biban mountain range also holds an important place in Algeria's culture and history, with notably many Roman and Ottoman monuments. Finally, the clean air, ecology and cultural sites mean the region has started to fulfil some of its tourism potential in recent years.

The targeted area of intervention of the project within the Biban mountain range is the forest and mountain ecosystems in the two adjacent communes of Ighil Ali (Bejaia Wilaya) and Teniet En Nasr (Bordj-Bou-Arreridj Wilaya). These rural communes have high patrimonial and historical value with rich cultural traditions. They have considerable water resources, significant forest cover, large areas of agriculture and rangelands. They are both renowned for the quality of their agricultural products. A large working-age population exists in both communes, and many of the traditional skills and much traditional knowledge has been preserved. They are both considered to have potential for eco-tourism. Another selection criterion for these communes is that they belong to two different Wilayas which will facilitate upscaling on the project interventions. The combined population of the two communes is approximately 19,500 inhabitants (based on 2008 census, 13,232 inhabitants in Ighil Ali and 6,295 in Teniet En Nasr) and the combined surface area is approximately 32,000 hectares, including approximately 16,000 hectares of forest land, 10,000 hectares of agricultural land and 6,000 hectares of pastoral land.

However, both communes face several socio-economic challenges. Employment opportunities are almost null and 50% of the population is unemployed[5]. The sharp relief, the poor quality of the soil, the ongoing degradation of natural resources and the small land sizes mean that most agriculture is low-yielding and poverty levels in the communes are therefore high. Loss of vegetation cover and unsustainable practices causing erosion are leading to further declines of productivity particularly in upper areas. Limited technology means that there is limited value-adding and limited secondary economic activities in the region.

Biodiversity in the Biban mountain range and the targeted communes:

Algeria lies at the intersection of two phytochorions – the *holarctis* and the *paleotropis* – and hence its flora is especially rich. Forest ecosystems cover approximately 4.1 million ha (1.72% of the country) and are mainly found in the mountaneous areas of the North of the country. 16,000 species from all taxonomic groups have been inventoried in Algeria including 700 endemic species and 226 threatened species[6]. 51% of Algerian plant species are rare or very rare[7]. The Biban mountain range has been identified as the 28th Algerian KBA for plants. The area is dominated by Matorral with juniper and holm oak, and harbors many endemic plant species including *Bunium elatum*[8]. The plant biodiversity has not been fully studied, however, there is a large range of medicinal plants which have been observed such as two kinds of rosemary (*Rosmarinus officinalis and Rosmarinus tournefortii*), the strawberry tree (*Arbutus unedo*), the Phoenician juniper (*Juniperus phoenicea*), the prickly Juniper (*Juniperus oxycedrus*), wormwood (also called mint of the mountains, i.e. *Artemisia vulgaris*), pennyroyal (*Mentha pulegium*), globular (*Globularia vulgaris*) and bushy globular (*Globularia alypum*), thyme (*Thymus vulgaris*), the broom (*Genisteae sp*), the Pistachio mastic tree (*Pistacia lentiscus*), the Barbary thuja (*Tetraclinis articulata*), the white grass wormwood (*Artemisia herba-alba*), the Wild Jujubier (*Ziziphus lotus*), the white flowered cistus (*Cistus albidus*), the Italian rockrose (*Cistus villosus*), and the retam (*Retama cephalospora*). In addition, wild almond, wild cherry and caper can be found in the Biban mountain range. Although there have been few studies, agrobiodiversity appears to be rich in the Biban mountain range. The population uses traditional practices to cultivate locally developed plant varieties and raising different livestock races, many of which may have specific genetic characteristics that warrant study and conservation. For example, there are known to be many varieties of the following: fig (e.g. tazla, taamtooit, bouankoud, adjaafar), apricot, olive, plum, apple and peach trees as well as varieties of pepper, onion, garlic, pea, squash and tomato. It is likely that some of these varieties are endemic to the Biban mountain range. The traditional knowledge and uses of this diversity of plants for food and medicinal purposes is also unique to region.

Fauna species in the two targeted communes within the Biban mountain range includes *inter alia* the following large mammals: 14 bat species, brown hare, boar, rabbit, porcupine, jackal, hedgehog, fox, striped hyena, stoat, weasel and genet. Furthermore, the Barbary macaque *Macaca Sylvanus* is found in Gouraya national park. Notable birds are also found in the targeted communes: booted eagle *Hieraaetus pennatus*, Bonelli's eagle *Aquila fasciata*, vultures, buzzards, kestrels and storks. The endangered Algerian Nuthatch *Sitta ledanti* is found in the Babor National Park. Forest ecosystems are mainly constituted of Aleppo Pine *Pinus halepensis*, Prickly Cedar *Juniperus oxycedrus*, Atlas cedar *Cedrus atlantica*, Phoenicean Juniper *Juniperus phoenicea* and Holm Oak *Quercus ilex*.

The rich biodiversity in the Biban mountain range results from the geographical, geological and meteorological characteristics. The sharp reliefs, the harsh climate (with six bioclimatic zones within a short range, encompassing high diversity in rainfall, temperatures and seasonality), the combination of high mountains and the proximity to sea results in unique ecosystems and biodiversity.

Threats to biodiversity and land in the Biban mountain range

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Sustainable harvesting of forest ecosystems and sustainable management of rangelands and agricultural lands were common until the 1960's and into the 1970's in Algeria and the Biban mountain range, when population pressure was lower and the government support systems to forests and agriculture had high capacity. Nowadays, the Biban mountain range is highly populated and pressure on natural resources is increasing. During the civil insecurity of the 1990's economic activities in this region were limited, and so degradation was also limited. However, during that period, all the existing natural resource management mechanisms, including the Department of Forests and the Department of Environment, effectively lost access to the land, and as such they

were not able to maintain a management presence. Further, during that period, management capacity (of natural resources) declined progressively. As a result, once economic activity started up again in the early 2000's, the natural resources management capacity was highly limited, harvesting and processing activities were rarely sustainable, and this led to land degradation and biodiversity loss.

As noted in the National Action Programme to Combat Desertification (NAP, 2004)[9], in Algeria "*the forests seem to be sliding rapidly on a path of progressive degradation of the main species and their replacement by the scrub and brush*". The Biban mountain range is characterized by high sensitivity to land erosion which affects 70% of the area. This susceptibility to erosion is induced by the interaction of several components of the physical environment, including land use, lithology, climate and particularly the very rugged terrain with sharp relief, and the dense hydrographic network which is fed by a precipitation concentrated into a short period, and often torrential. As a result, 50% of the land between 400 – 800m altitude is considered unstable or highly unstable, as is 31% of land between 800 and 1200m where most of the remaining forests are[10].

The assessment undertaken to prepare this PIF[11] revealed the following threats to the forests, to the ecosystems, to the land and to the significant species present: fires and forest fires, over-grazing, unsustainable agriculture and encroachment (forest clearing), over-harvesting, logging (for construction) and climate change. The details and scale of the threats vary from site to site, and even from season to season. A full assessment will be undertaken during the PPG phase. Preliminary information is provided in the following paragraphs.

Fire is the single most prevalent and most damaging threat. The two targeted Wilayas are among the 10 Wilayas most affected by fires (number of households affected) in the country between 2000-2018[12]. Although many oak and pine trees are fire resistant, fire destroys the ecosystem through the following impacts:

- destruction of the undergrowth removing most species;
- destruction of young oaks and pines;
- weakening of even healthy oak and pine through recurrent and repeated fires;
- reduction of vegetative cover causing soil erosion;
- damages to soil layers;
- contribution to the entry/emergence of many other threats such as disease, agricultural encroachment, unsustainable grazing, and invasive species.

Over-grazing. Ighil Ali has approximately 800 sheep, 65 goats and 64 cattle. Teniet En Nasr has approximately 9,000 sheep, 1,100 cattle and 800 goats. These figures are well within the carrying capacity, particularly for Ighil Ali. However, the livestock are concentrated in certain areas where inappropriate management and population growth mean the livestock contribute to land degradation and reduces forest regeneration capacity, notably by over-grazing vegetative growth and over-trampling. For example, as stated in Algeria's 5th Report to the CBD[13]: *"Forests are often required by pastoralists as a source of grazing for livestock. In Algeria, forest land contains 1,300,000 cattle, 600,000 goats and 400,000 sheep which is respectively 80, 30 and 25% of the total livestock. This is estimated to be twice the sustainable carrying capacity*".

Encroachment. Northern Algeria is densely populated. Since the late 1990's, the government has encouraged the population to return to rural areas. However, due to the mountainous nature, there is a scarcity of good land for agriculture or urban expansion. Hence, there is a pressure to convert forests to public buildings, or to domestic buildings, or to small-scale industrial buildings or to small-scale agriculture. This latter pressure, notably to convert to olive orchards, is particularly strong, including in the Biban mountain range.

Unsustainable harvesting. This is notably the unsustainable harvesting of many NTFP such as medicinal, edible, fodder or aromatic plants (e.g. cork, carob). This harvesting is done almost entirely by local people. Over-harvesting precludes regrowth, especially harvesting of nuts and berries. In addition, the act of over harvesting leads to damage to the surrounding habitat, and further facilitates the entry of other threats.

Logging. Small scale logging in the Biban mountain range, mostly by local people for construction, is unmanaged and in some parts is unsustainable. This leads to forest loss, to a general weakening of the ecosystem, and the progressive conversion of forest land to wasteland.

Pollution. Pollution of natural areas with solid and liquid is considered as a major cause of biodiversity loss in forest and mountainous areas including rivers (NBSAP, 2016).

Climate Change. Climate change is known to be a threat to biodiversity and to forest ecosystems, although very little factual evidence and data is available for the Biban mountain range mountain forest ecosystems. It is projected that climate change in northern Algeria will lead to: more intense hot periods, more intense and extensive dry periods, increased averages temperatures, and fewer cool days/nights. Each of these can affect the oaks and the pine forests, their productivity, the health of the ecosystems, and many of the other species in the ecosystem. Further, climate change is understood to be a cross-cutting threat as it mostly exacerbates or facilitates other threats – such as fire, disease, alien invasion and fragmentation.

According to Algeria's National Biodiversity Strategic Action Plan (NBSAP, 2016)[14], climate change will affect forest ecosystems through the following vectors: increasing fire, increasing desertification, drying of water courses, increased landslides, more intense storms and increased temperatures. Further, the NBSAP observes already the following: "*the main vulnerabilities concern the temperature and the droughts that threaten the floristic species; Combined with deforestation, they are the main threats to Algerian forests, particularly in terms of degradation and / or fragmentation of habitats. Similarly, increasing the imbalance of the pastoral burden coupled with worsening erosion reduces the resilience of the ecosystem*". Finally, it is known that the distribution of many plant species will change – notably moving higher in altitude, and this may fundamentally threaten ecosystems and habitats.[15]

The loss of biodiversity and land degradation are closely linked. One of the main causes of land degradation is the lack of adequate forest cover, and one of the main vectors of biodiversity loss is the degradation and destruction of forests. That is, the factors that lead to forest degradation and destruction are indirectly leading to both biodiversity loss, and also to land degradation through erosion.

The Barriers to Establishing Integrated, Sustainable Land and Forest Management in the Biban mountain range

Poverty is widespread in the rural population and this situation has intensified in recent years as (i) the government has encouraged people to return to rural areas and (ii) national oil revenues have declined thereby reducing the subsidies and programmes to address poverty issues. There is **limited livelihood opportunities based on the sustainable management of natural resources in rural areas**. Communities have no alternative but to expand livestock populations and agricultural land. In many cases, local people have limited knowledge on forest management. Unsustainable practices notably includes: (i) converting forest to agriculture; (ii) over-harvesting NTFPs; (iii) entering the forest with large numbers of cattle; and (iv) unsustainably collecting wood.

Local communities have **limited knowledge on the role of biodiversity and natural ecosystems, including the diversity of goods and services provided**. The value attributed to natural resources is mainly limited to immediate financial value of forest products. As a result, local communities – and often local authorities – resent efforts to conserve forest, as they see this as directly limiting their economic opportunities. The forest is therefore often perceived as a barrier to economic development and to escaping poverty.

The economic system greatly undervalues ecosystem goods and services. As seen in the previous sections, land and forests can produce a vast range of goods, products and services on a sustainable basis. In addition to timber, fodder, NTFP, this also includes environmental services such as water and soil conservation. However, the current economic system rarely converts these products and services into an economic value for local people or the national economy. These environmental services are generally not well understood and the mechanisms to convert them into an economic value are not developed in Algeria. They are ignored in economic decision-making, both at the household level and at the government level.

During the 1990s, the population left the rural areas, and both government foresters and government agricultural extension services were unable to work in rural areas. Agricultural extension workers and foresters were unable to practice for over a decade. This led to a long break in agricultural support and forestry activities. During this period: (i) many experienced technical experts retired; (ii) very few new experts were employed, and those that were employed could not obtain field experience and; (iii) even the experienced technical experts that remained in employment did not obtain much field experience. As a result, **the technical knowledge and capacity is the country for sustainable agriculture and forest management is low**. Subsequently, it took some time to re-start natural resource management and the approach adopted by decision-makers, planners and technical staff in forestry and land management sectors has mainly remained unchanged from the approach used in the 1990s.

The socio-economic situation has changed considerably since the 1990's. Further, the extent of land and forest degradation has evolved considerably. The threats to land and forests have evolved. Over-grazing, fires, climate change and encroachment were not significant threats in the late 1990s'. Because of the aforementioned break in agricultural and forest management support and programmes that lead to the loss of technical expertise in this field, **current approaches of decision makers, planners and technical staffs regarding the management of forest and agricultural resources are outdated**. The tools and information used to manage land and forests in the 1990's are no longer suitable for the current situation. For example, the approach to forestry is based on

the following principles: forestry is seen as an independent sector that can be developed in isolation from other sectors and stakeholder groups; forests are seen as something to keep the local people out of, rather than as a resource for all people, and; forest management often focuses on a single product or species – e.g. timber from pine – and the vast diversity of products and potential economic opportunities is not appreciated. Similarly, extension workers for livestock husbandry are still focused on maximising production and are unable to integrate rangeland management with sustainable land use and forestry conservation.

Local models and examples of how to approach sustainable, integrated management of biodiversity, forest and land resources that is adapted to the Biban mountain range are required as a basis for developing capacity, for changing attitudes and for developing tools and collecting information. However, at present, **no successful examples of approaches and practices for the sustainable management of biodiversity, forest and land resources are available** to serve as a model to be applied in the Biban mountain range.

2) Baseline scenario and associated baseline projects

Since the mid-2000's, the economic renewal of agriculture and rural areas has been a national priority policy initiative for the Algerian Government. This has many aspects. In the targeted communes, two of the more effective mechanisms are (i) rural development projects, financed by national Ministries and implemented through the Wilaya government at the commune level; and (ii) youth enterprise schemes, supported by the Ministry of Work, Employment and Social Security and implemented by the National Agency for Promoting Youth Employment (ANSEJ).

The planned and ongoing rural development projects are summarized in the table below. As can be seen, the total investment in the targeted Wilayas are USD9,650,254 (including USD5,337,392 considered as cofinancing) in Bejaia and USD9,847,755 (including USD6,538,763 considered as cofinancing) in Bordj-Bou-Arreridj. This includes investments at the wilaya level and in the targeted communes.

Investment period 2018-2019	Bejaia Wilaya (all communes, including Ighil Ali)	Bordj-Bou-Arreridj Wilaya (all communes, including Teniet En Nasr)
Waste management	USD8,312,862 (of which USD4,000,000 considered as cofinancing)	USD5,608,992 (of which USD 2,300,000 considered as cofinancing)
Environmental studies	USD84,000	-
Agricultural development (DGF)	USD350,392 (**Ighil Ali)**	USD151 480 (**Teniet En Nasr)**
Communication facilities (CNFE)	USD903,000	USD877,800
Technical equipment centre	-	USD2,520,000
Youth development (ANSEJ)	-	USD689,483 (**Teniet En Nasr)**
TOTAL investments	**USD9,650,254**	**USD9,847,755**

Table 3: Summarizing commune level infrastructure investments[16].

Most of the investment planned in the two Wilayas for the upcoming period is for improved waste management. This has long been identified as a priority in the two targeted communes. This government will provide multiple benefits such as increased potential for tourism, pollution reduction, and job creation. The GEF-funded project will benefit from this investment that support ecotourism development activities, and biodiversity, ecosystems and land conservation interventions. The strengthening of awareness-raising facilities (i.e. “maison Wilaya d’el Bordj”) will also support the awareness-raising interventions of the GEF-funded project. The government investment in agricultural interventions include: roads construction and management (12 km), fruit trees plantations (10 ha), apiculture development, 80 ha of woodlots, flood protection measures. The GEF-funded project will build on these infrastructures – as well as on successes and lessons learned – for the establishment of MSMEs focused on sustainable agricultural and forest-based income-generating activities. Last, the GEF-funded project will fill in the remaining knowledge gaps on Biban mountain range building on the ongoing and planned environmental studies (USD 84,000 considered as cofinancing).

The National Institute for Agricultural Research (INRAA) under the Ministry of Agriculture, Rural Development and Fisheries is currently implementing a project (USD9,223,158 for 2019-2022 including USD6,000,000 considered as cofinancing) for olive production in mountainous systems in three Wilayas: Ouzou, Bejaia and Bouira. The objective is to improve trees’ and products’ quality, increase the use of byproducts and reduce input needs. INRAA is also implementing a project in collaboration with the European Union to support olive, date and crop production with a budget of USD 18,000,000 for 2019-2023 (including USD8,000,000 considered as cofinancing). The targeted Wilayas are Tizi, Bouira, Bejaia, El Oued and Biskra. The National Institute for Forest Research (INRF) of the Ministry of Agriculture, Rural Development and Fisheries is also implementing a small project (USD12,500) for carob *Ceratonia siliqua* production which includes the establishment of a carob tree plantation for tree selection, seed production and grafting. Carob trees are naturally found in Algeria and their leaves, pods and seeds are traditionally used for their various properties. It has a strong economic interest for rural development and

livelihood diversification in Algeria. It also has a strong environmental interest as it is drought resilient, melliferous, and it can grow on relatively poor soil which makes it a good candidate for soil restoration interventions. The objective of the INRF project is to: i) develop the production of this drought-resilient tree through improving understanding on the requirements of the species, establishing plantations and strengthening value chains; and ii) preserve natural carob stands through sustainable exploitation. These interventions are of interest for the NTFP and agricultural development interventions planned under the GEF-funded project, and will provide valuable experience on adequate tree and crop species in mountainous areas including resilience and availability. The GEF-funded project will contribute to upscaling and sustaining successful interventions of INRAA and INRF projects through promoting integrated and participatory development plan that include improved forest- and agriculture-management practices, awareness raising on the benefits of improved practices such as agroforestry, development of sustainable livelihoods that contribute to reducing land degradation, and policy strengthening and additional funding sources to promote sustainable management practices.

The Government-funded public investments in the targeted communes (from MEER and through the Wilayas government) is mainly supporting – through the decentralized government – waste management, agricultural development, renewable energy development and youth employment. Government investment have long focused on addressing socio-economic emergencies and remain sectoral and at a small scale. This prevents real improvement in the socio-economic conditions through integrated development in Ighil Ali and Teniet En Nasr communes which remain poor. The communities have very limited opportunities for changes in environmental, land-use, forestry and agricultural practices because of insufficient institutional, technical and financial capacity to shift towards sustainable forest and land management practices. Unsustainable practices are leading to forest loss, biodiversity loss, and soil fertility loss. As a result, food insecurity and poverty is increasing. The absence of improved livelihoods is fueling progressive exodus from rural areas to towns and cities.

The European Union (EU) is funding the Programme “Support to Rural Development and Agriculture (PAP-ENPARD) in collaboration with DGM. This project focuses on four pilot Wilayas: Sétif, Ain Témouchent, Laghouat and Tlemcen. Under this programme, the project entitled “Support to Rural Communities in National Parks” (2016-2019; USD677,000) is being implemented by AREA-ED, Torba and BEDE Associations. Interventions for the valorization of local agricultural products and strengthening of value chains are being implemented under this project to support local community within and surrounding the national parks of Djurdjura and Babor-tababort.

The National Agency for Nature Conservation is currently undertaking an inventory of flora species particularly medicinal, aromatic, fodder, rare and endemic species as well as orchids, fresh water fish species in Béjaïa Wilaya. The Agency is also monitoring the number of birds, inventoring and monitoring wetlands, and undertaking awareness-raising interventions.

International Cooperation in the baseline

Algeria has benefitted from significant support for rural development from FAO and for the forestry sector from the German Government (through GiZ). GiZ has notably been very much involved in supporting a response to climate change in the forestry sector, and in developing tools to add values to key NTFP. This has led to a series of reports (e.g. technical guide for bee keeping, for barbary fig, for certified mastic tree oil production produced in January 2019), recommendations, action plans, and this has led to significant capacity built. Notably GiZ built capacity in Algeria related to understanding climate change through two regional projects and it helped develop an action plan to establish traceability systems for NTFPs, and it supported an analysis of the value chain

and developed actions plan for NTFPs including cork, mastic resin and honey, and for charcoal. GIZ is currently implementing the project "Environmental Governance and Biodiversity" (2014-2019) in Wilaya El Tarf, including El Kala National Park. This project focuses on environmental education, improved governance, and strengthening of NTFP value chains (i.e. mastic oil, barbary figs vinegar and oil) in the areas neighboring the national park. This work provides a good basis for future action with these and other NTFPs to support forests and biodiversity conservation around and within protected areas, and promote sustainable livelihoods.

Algeria joined FAO in 1963. Since then, FAO has provided policy and technical assistance, including in areas related to rural development, natural resource management and adapting to climate change. Notably, the FAO supported Project "*National Strategy for the Management and Sustainable Development of Forest Resources*" included a thorough analysis of the forestry sector and supported the elaboration of the *Forest and Alfalfa Policy* (2006). The FAO Algeria Country Programming Framework (CPF) for 2013 - 2016 included three priorities, one of which was "*improved natural resource management, through a better understanding and constant monitoring of the status of agricultural and other natural resource*" which included support to the forestry sector. FAO also supported the TA Project (TCP/ALG/3501) "*Integrated and sustainable management of Biban Mountain range*" in 2015-2016. This project undertook data collection, consultation and planning in order to develop a sustainable management plan for two key communes in the Biban.

In the baseline, the ongoing and planned FAO country programme includes the following projects, which are complementary to this proposed GEF intervention:

Project	Short Description	Status	Amount
Implementing the 2030 Agenda for Water Efficiency/Productivity & Water Sustainability in NENA	The project intends to set up a framework for implementing the 2030 Agenda for water efficiency and productivity (SDG 6.4). Its components are: (i) establishing a robust water accounting system providing the evidence base for the full water budgeting and monitoring; (ii) implementing interventions to increase water efficiency and productivity in selected farming systems (e.g. introduction/enhancement of good practices and affordable technologies;improvement of decentralized water governance; development of under-exploited value chain rural agro-industry; leveraging on the multiplier effect to increase productivity when accounting for gender dimensions in the adoption of on-farm practices and technologies, in decentralized governance and along the value chain; elaboration of incentive frameworks, adapted to each local conditions, to promote the uptake of good practise and technologies at farm level and to stimulate entrepreneurial initiatives along the value chain); and (iii) ensuring that higher efficiency/productivity achievements for the 2030 time horizon are achieved within safe operational boundaries of water use, defining the conditions for water sustainability and, therefore, for a sustainable, socially equitable and human-rights based development.	Planned for 20	USD 10,153,938 (m

		16-2020	(...obilized investment: USD5000,0000)
FAO project TCP/ALG/3603	The project supports agricultural extension, the rejuvenation and regeneration of traditional olive groves and the modernization of olive tree management. Overall this will improve the quality of olive oil production and compensate for the low competitiveness of the Algerian olive oil sector.	2018-2021	USD145,0000 (mobiliz

				Zedinvestment: USD50,000)
FAO project TCP/ALG/3701 for the development of micro enterprises based on NTFPs	The objective of the project is to improve the contribution of forests to national economy, improve rural livelihoods and sustainably manage forest ecosystems. The project interventions focus mainly on three products: carob, rosemary and pine nuts. It is implemented in Constantine, Khenchla, Mostaganem and Blida. It helps improve the management of natural resources (i.e. co-management), strengthen value chains, and support the development of microenterprises focused on these products.	2018-2020	USD295,000 (mobilized inve

				stment: USD156,000)
FAO project TCP/ALG/3702 for the development of a strategy to improve the value chain for barbary figs	The objective of this project is to develop the value chains for *Opuntia ficus-indica* to diversify livelihoods in rural areas and contribute to addressing poverty and improving food security. It will first undertake a stock-take of fig production activities in the country and identify potential zones for expansion. A market analysis will then be realized and a campus for innovation and research to increase production and quality will be established. Last, capacity building interventions will be implemented and the strategy to promote barbary fig production and value chains will be developed. The intervention sites are currently being defined but they will include the communes of Ighil Ali and Theniet Ennas.	2019-2020	USD261,000 (mobilized investme

			nt: USD 1000,000)
FAO project to undertake the national inventory of local products	FAO will support the Ministry of Agriculture, Rural Development and Fisheries in revitalizing rural areas through the valorization of agricultural products of known quality and provenance. It will support small-scale farmers as a priority, and focus both on the Algerian market and on exportations.	July 2019 – July 2020	TBC

The Biban mountain range has received very little investment from international cooperation.

3) Proposed alternative scenario and brief description of expected outcomes and components of the project

The objective of the proposed Project is **to protect biodiversity and forest ecosystems, and improve the management of natural resources of the Biban mountain range**. The GEF resources will therefore be used to remove the barriers to the sustainable management of the Biban mountain range ecosystems. This will be done through the implementation of the following components:

· Component 1 focuses on changing the attitudes and preferences of local stakeholders (notably local resource users and local officials) with regards to biodiversity, forests and land. Component 1 will increase the knowledge available on the species richness and degradation of the Biban mountain range, as well as the social, economic and cultural value of its natural resources. This information will be used to develop a positive attitude towards natural resources among government officials and local stakeholders to make them more appreciative of the value of land, forests and biodiversity, and to give local stakeholders the desire to conserve and sustainably use land, forests and biodiversity. Development planners will be supported in designing integrated development plans for biodiversity, forest and land preservation.

· Component 2 will give local stakeholders the tools and ability to generate revenue and improve their socio-economic conditions, whilst at the same time conserving and sustainably using land, forests and biodiversity. Through a package of technical, micro-financial and governance support, the interventions under Component 2 will support local people to develop economic activities in the forest, agriculture and tourism sectors that promote natural resources conservation.

· Component 3 will ensure that the successful practices, lessons, tools and capacity developed are being replicated to all pertinent sites across the Biban mountain range. This will be done through the creation of a Biodiversity Platform, strengthening of the policy framework to support sustainable land management and biodiversity, dissemination of good practices, awareness raising of decision makers, and identification of public and private funding sources.

The combination of these three complementary components will contribute to the reversal of the current situation of land and forest degradation towards preserving the rich biodiversity of the Biban mountain range, and will generate social and economic benefits from forests and other natural resources for local people.

Expected outcomes and components of the project

Component 1: Biodiversity and Land management planning, policy strengthening and financial capacity building for Sustainable Forest and Land Management in the Biban mountain range.

Outcome 1.1: Biodiversity conservation and sustainable land management are integrated into communal development plans and budgeted for in Ighil Ali and Teniet En Nasr communes.

· Indicator 1: Number of government staff from the central to the local level trained on biodiversity monitoring and land-use planning for sustainable land, forest and biodiversity management

· Target 1: At least 100 government staff.

· Indicator 2: Number of Communal Development Plans that address biodiversity and land degradation concerns developed and implementation initiated

· Target 2: Two Communal Development Plans that address biodiversity and land degradation concerns

The knowledge available on i) the species and ecosystems of the Biban mountain range, as well as the sources of degradation and their effects and on ii) the social, economic and culture value of biodiversity, land and ecosystems will first be increased. Understanding of decision makers, planners and communities in the targeted communes will be built through training and awareness raising. Medium-term management plans will then be developed in a participatory

manner at the communal scale. These plans will then be institutionalized in local laws and/or protocols – a contractual agreement between local people, local officials and national agencies. Finally, for each commune, a Committee will be established to oversee implementation of the plans.

Output 1.1.1 Training sessions organized for government staff including technical staff, decision makers, and key officials and influencers on biodiversity assessments and ongoing monitoring, on how to prioritise specific interventions and landscapes for biodiversity conservation and ecosystem functioning, and on land-use planning, in Ighil Ali and Teniet En Nasr communes, and at the central level

This output focus on building capacity among officials and technical government staff to enable sustainable forest and land management in the targeted communes and at the national scale. Targeted institutions will include *inter alia* government institutions in the sectors of environment, agriculture, tourism, water, urbanism, transportation, planning, risk management, meteorology, as well as research institutions. Training sessions implemented for local decision makers, planners and other leaders will include the selection, prioritization, design, planning and implementation of interventions for the sustainable management of natural resources using a landscape approach. The capacity gaps to be addressed is to be determined during the project.

Output 1.1.2 Knowledge gaps addressed through supporting government staff in completing the inventory of fauna and flora species, and mapping of biodiversity, ecosystems, threats and levels of degradation in the Biban mountain range

Some studies describing species richness are available for the Biban mountain range, particularly for plant species. However, they are partial and often outdated. The information available is mainly based on observations. Data available will be updated under this output and the gaps will be filled. The deliverables of this output will include: i) a full inventory of the fauna and flora species, and their distribution; ii) a biodiversity map identifying hotspots; iii) a biodiversity loss map identifying threats and levels of degradation; and iv) a land and forest degradation map presenting sources of degradation and effects, including land and forest degradation hotspots. These studies will be undertaken in a participatory manner, involving experts, government officials, local officials, local influencers and representatives of the local population. This will be done across the Biban mountain range.

Output 1.1.3 Social, economic and cultural value of biodiversity, land and ecosystems in the Biban mountain range assessed by government staff using a participatory approach

The value of biodiversity, land and forest ecosystems at all levels – including environmental, financial, economic, social, cultural and patrimonial values – in the Biban mountain range will be assessed. The cultural value and traditional uses of natural resources are of particular importance in the two targeted communes, and will therefore be investigated under this output. The methodology used to undertake the biodiversity part of the assessment will be aligned as much as possible with the CBD convention guidelines. This assessment will build the arguments for the awareness raising interventions under Output 1.1.3 and 3.1.2.

Output 1.1.4 Two 'Biodiversity and Land Management Plans' – one from each commune – with zoning exercise, detailed action plan, and Gender-balanced Implementation Committee, developed by local communities with support from government official, and implementation initiated

Outputs 1.1.3 should have created a groundswell of support for biodiversity conservation and sustainable land management, as well as some understanding of the issues. Building on that, in a participatory manner, Output 1.1.4 will develop two local Biodiversity and Land Management Plans – one covering Ighil Ali commune and one covering Teniet En Nasr commune. These Plans will set out the targets, strategies, responsibilities and actions necessary to shift the local development path to a path that conserves biodiversity and land. A map will be created under each Plan to establish different zones in the commune (e.g. no access zone, protected zone, agroforestry development zone, small-scale livestock husbandry development zone, pastoral zones, key cultural zones, ecotourism attraction development zone). A series of concrete activities will be defined for each zone. This will include the development of an animal feeding calendar and/or rotational grazing schemes to address over-grazing issues in pastoral zones. Many of which will be implemented through Outcome 2, that will also lead to improved socio-economic conditions in Ighil Ali and Teniet En Nasr. This zoning exercise and activities permitted in each zone will be based on the biodiversity and land degradation maps developed under Output 1.1.1. The Plans will also set out details of: (i) the resources required to implement the plan and timeline, and (ii) a monitoring and evaluation framework. To support and monitor the implementation of the plans, local officials, leaders and decision makers will establish a local, voluntary Plan Implementation Committee (PIC). In each concerned commune, the PIC will be responsible for: (i) preparing annual implementation strategies; (ii) monitoring Plan implementation; (iii) regularly raising awareness on the Plan; (iv) helping to mobilize resources to implement the Plan; and, (v) updating the Plan every three years. The Biodiversity and Land Management Plans will be integrated in the next process of revision of the 5-year Communal Development Plans planned to start in 2020. They will form an integral part of these development plans that cover the agricultural, pastoral and environmental aspects of the development plans.

Output 1.1.5 Gap analysis of the investment plans for the Communal Development Plans, identification of financial opportunities to fund the Biodiversity and Land Management Plans, and mobilisation of these funds through advocacy

Under this output, the investment plan to implement the Communal Development Plan for Ighil Ali and Teniet En Nasr respectively will be analysed to identify the gaps regarding the interventions in the agricultural, land-use planning and environmental sector included. This will be done in collaboration with local government and with the PIC. The gap analysis will take into account the budget of the relevant sectors (agriculture and livestock, environment, forestry, land-use planning, family, gender and youth) as well as GEF investments under Component 2 (including the micro-enterprises) and other funding sources allocated. Additional sources of funding will be identified to fill in the identified gaps, and the funding of the remaining interventions of the Biodiversity and Land Management Plans will be advocated with national and local government. The goal of this output is for the interventions of the Biodiversity and Land Management Plans to be fully funded.

Output 1.1.6 Two local bye-laws with protocols to support the implementation of the Biodiversity and Land Management Plans.

This output is the institutionalization of Outputs 1.1.3 and 1.1.4. In both communes, a local bye-law will be created and issued which establishes in local law the aims of conserving biodiversity, sustainably managing land and implementing the Biodiversity and Land Management Plans. The local bye-law will represent a mutual contractual agreement between the following three parties: national environmental agencies, local officials and local stakeholders. This mutual agreement will have the twin objectives of conserving natural resources and improving the socio-economic situation. These bye-laws will give legal support to regulate the activities that are mandatory, encouraged, or banned in the different zones defined under Output 1.1.4. Output 1.1.5 should also be used as a tool to facilitate the mobilization of additional resources to the communes to help implement the plans. As necessary, the bye-laws will include implementation protocols, for example governing the details of agricultural, tourism, forestry or other activities.

Output 1.1.7 Opportunities for the creation of one or several Protected Areas identified towards supporting ecotourism and creating spatial continuity with Djurdjura, Gouraya and/or Babors National Parks, and consultative and legal processes towards the Protected Area creation process initiated if appropriate

The Biban mountain range does not contain protected areas to date. The closest National Park to the Biban mountain range is Gouraya National Park which is located within the Béjaia Wilaya. Djurdjura and Babors[18] National Park are also at close proximity to the Biban mountain range. The project will contribute toward achieving a well connected systems of protected areas (in alignment with Aichi target 11) by assessing the potential for the creation of one or several protected areas within the Biban mountain range in collaboration with the management offices of the existing parks. This will be done in alignment with the zoning exercise under Output 1.1.4. If adequate opportunities for the creation of potential protected areas are identified, the project will contribute to initiating the process toward their creation.

Component 2: Adoption of sustainable sources of income that contribute to conserving biodiversity and reversing land degradation by local resource users in the targeted communes

Outcome 2.1: Nature-based sustainable businesses in Ighil Ali and Teniet En Nasr communes are developed and are directly contributing to the conservation of biodiversity, forest ecosystems and land.

- Indicator: Number of sustainable Micro Small and Medium Enterprises (MSMEs) generating profit established including for women and youth
- Target: at least 25 MSMEs established in each commune

The Outcome develops the pragmatic capacity to build businesses that generate profit and conserve natural resources. A technical support service will first be established to assist MSMEs to develop business plans. The selected business plans will then be established with direct or indirect support from the project – taking care to not undermine financial or economic sustainability.

Several studies have already been produced on sustainable economic development opportunities in the targeted area. The studies undertaken within the FAO supported project (TCP/ALG/3501) “Integrated and sustainable management of Biban Mountain range” have led to a series of recommendations for potential green and biodiversity friendly industries. The Report on “Inventory and analysis of tourism within the Biban mountain range” highlighted the potential for tourism development in the targeted communes and priorities to be addressed to develop sustainable tourism in the Biban mountain range. A “Strategy for the development of ecotourism in the Biban mountain range” (2016) was also developed. These recommendations have been built on for the development of the PIF and will further guide the design of the interventions during PPG phase. Moreover, a report was produced on “Sustainable, integrated waste management” in the targeted communes which includes recommendations for recycling and re-using waste products, notably the bi-products from processing agricultural products, that will be taken into consideration under the project.

Output 2.1.1 A government-based technical support team established to assist, monitor and enable the maintenance of the sustainable income-generating activities to be developed and implemented under Outputs 2.1.2 and 2.1.3.

Member of this service will include local government experts across relevant ministries which include agriculture and livestock, forestry, environment, water, social solidarity (family and gender), work (employment and microfinance) and youth. This technical guidance mechanism will also include regional, national and international expertise as appropriate. The set of technical areas on which expertise will be made available under this mechanism include:

- organic agriculture – how to do it, and how to make it productive and profitable, with a focus on the development of traditional varieties and practices;
- conservation agriculture – how to do it, and how to make it productive and profitable (e.g. composting, permaculture);
- sustainable livestock grazing;
- NTFP harvesting and processing – which products to harvest, and how to make the harvesting sustainable, productive and profitable;
- sustainable timber harvesting and processing – how to make it productive and profitable; and
- eco-tourism and agritourism.

The interventions under this output will include supporting the institutionalization of the technical support service in order to maintain it beyond the project lifespan.

Output 2.1.2 At least 100 Sustainable business plans in agroecology, agritourism, ecotourism, handcrafting, forestry, NTFP value chains or other economic activities developed in alignment with the Biodiversity and Land Management Plans and zones (Output 1.1.4).

Under 2.1.2, at least 50 medium-term business plans will be prepared by community members. Particular attention will be given to attract youth and women as project applicants. The business plans will have to be aligned with the Biodiversity and Land Management Plans. They will focus on entrepreneurial and profit-oriented activities that will generate revenue through undertaking activities that support biodiversity conservation, land management, forest ecosystem management, or all three. A clear path to financial sustainability will have to be integrated in each business plan. Each business plan will focus on one product that can be developed and marketed[19]. For example, such business plans will include: the development of ecotourism activities to discover the mountain, agritourism activities to visit agroforestry fields, improved agricultural practices based on agroecology principles, handcrafting projects such as carpet weaving and basket making based on sustainably harvested resources, or processing of sustainably harvested NTFPs (e.g. cork, olive, fig, carob, oak acorn, mushroom, honey). The business plans will demonstrate the economic and financial feasibility of each concerned investment, as well as defining the total investment, the investors, the actions, the timelines, the stakeholders, the risks and the targets. At least 40% of the business plan owners will be women.

Output 2.1.3 At least 50 MSMEs that are generating income and contributing to biodiversity, ecosystems and land conservation established.

A set of selection criteria will be developed and at least 25 business plans per commune will be selected out of the business plans developed under Output 2.1.2. The selection process will be undertaken in a transparent manner to ensure that the individuals who business plan is not selected have a good understanding of the justification behind this decision. In each Commune, the business activities of at least 25 MSMEs including women and youth will be helped to become financially and economically viable. As appropriate, the Project will provide catalytic grants to the entrepreneurs, to help initiate the pilot activities. A revolving fund will potentially be established. The Project may also support the establishment of small infrastructure such as common nurseries, common composting facilities, or tourist information points. However, in each case, to the extent possible, the aim is to have an economically sustainable infrastructure – so the nurseries, compost facilities and information points would be run by individuals in exchange for payment.

Component 3: Replicating and upscaling of successful interventions across the Biban mountain range

This Component will take the successful approaches and practices from Components 1 and 2, and upscale and replicate them across the Biban mountain range, thereby indirectly contributing to sustainable land management and biodiversity conservation across the entire Biban mountain range.

Outcome 3.1: Sustainable management and biodiversity conservation integrated in development planning across the Biban mountain range.

· Indicator 1: Sustainable land management, biodiversity and ecosystem service values integrated into sector and development policy documents and planning processes across the Biban

· Target 1: SLM and BD guidelines endorsed by planners and officials for integration into at least 2 policy documents and 2 communal development plans in the Biban mountain range

· Indicator 2: Additional private and public resources mobilized for the upscaling of sustainable land management and biodiversity conservation practices

· Target 2: To be determined during PPG

The Outcome will establish a high-level platform to oversee replication of successful approaches and practices. Guidelines to promote replication of successful approaches and practices will be developed in a participatory manner. Awareness-raising interventions will be implemented with a focus on decision-makers from the central to the local levels, and on the entire population of the Biban mountain range using the knowledge generated under Output 1.1.1 and 1.1.2 and the technical tools. Sources of financing will be identified and support to access them will be provided to enable the upscaling of successful practices for the sustainable management of biodiversity, forests and land within the Biban mountain range.

Output 3.1.1 An intercommunal Biban mountain range Biodiversity Platform including public and private sector actors established to promote biodiversity and ecosystems conservation, and support access to financial sources for the replication of good practices.

The intercommunal Biban mountain range Biodiversity Platform will be established to promote biodiversity and ecosystem conservation across the Biban mountain range, and support access to financial sources for the replication of good practices. A major objective of the platform is to bring together local governments, civil society and communities from the Wilayas of Bouira, Bejaia and Bordj-Bou-Arreridj that depends on the natural resources of the Biban mountain range, and provide a structure for negotiations, cooperation and alignment of efforts for the sustainable management of shared natural resources in the Biban mountain range. Another major objective of the platform is to share experiences thereby promoting the replication of successful interventions, and facilitate access of local communities to financing opportunities. The members of this platform will include community leaders, public and private sector leaders, Walis from the three Wilayas of the Biban mountain range, local government representatives and decision-makers from MEER and other relevant ministries, and environmental and social NGOs (e.g. Association Nadi El Mokrani Kalâa Ath Abbas, Assocation El Ghaith, Gouraya's Friends Association, Assocation for Nature Protection ARDH, Algerian Ecological Movement). The Platform members will meet regularly to share experiences and discuss land-use issues if any, to develop joint visions, harmonize efforts, identify funding opportunities, and raise communities' awareness. The Platform members will also oversee the implementation of Components 1 and 2, and will collectively determine ways to broadly disseminate the lessons learnt from those components. Focal points for the platform will be identified at the communal, Wilaya and central levels to ensure the maintenance of a dynamic platform beyond the project lifespan.

Output 3.1.2 Amendments to policies, strategies and plans proposed to enable and promote integrated, participatory, landscape-scale development planning, and sustainable land management and biodiversity conservation in the targeted Wilayas and at the national level

This output focuses on addressing a major barrier to the integrated management of natural resources which is the tendency of current policy documents that regulate the management of natural resources to consider natural resources as stand alone item regardless of their role within the ecosystem, and in the provision of ecosystem goods and services. Policy gaps will first be identified. Policy revisions will then be developed to promote an integrated approach to the management of natural resources at the regional (Wilaya) and national levels, and submitted for validation.

Output 3.1.3 Awareness-raising campaigns implemented for the general population across the Biban mountain range including women and youth on the importance of biodiversity and forest ecosystems, land degradation and other threats.

This output will focus on raising awareness of the entire population of the Biban mountain range. Awareness will be raised on the value of natural resources in the region and the threats faced. Based on the outputs from Components 1 and 2, and under the guidance of the Platform (Output 3.1.1), a series of awareness-raising activities will be designed and implemented. The type of awareness raising activity for the broader public is to be determined during the PPG phase, it may include television, social media, school events, theatre performances, posters, games, concerts and/or field visits to Ighil Ali and Teniet En Nasr. The awareness raising activities will remain flexible to address specific needs that would arrive during the implementation phase and to adapt to the receptivity of the targeted populations.

Output 3.1.4 Guidelines on best approaches and practices for sustainable development and biodiversity, forests and land conservation in the Biban mountain range developed and disseminated

This Output will formalize the successful approaches and practices to be applied in each categories of priority areas identified under Output 1.1.1. The Guidelines will define advised approaches and practices to enable sustainable development while preserving biodiversity, ecosystem or land resources across the Biban mountain range. These documents will include guidance on how to undertake agriculture, forestry and tourism in priority areas. Preferred approaches for public and private sector investments towards the development of socio-economic opportunities for local communities based on the sustainable management of natural resources will also be integrated in these guidelines.

Output 3.1.5 Public and private resource mobilisation strategy developed and implementation initiated to upscale successful practices for the sustainable management of biodiversity, forests and land within the Biban mountain range.

Under the guidance of the Platform (Output 3.1.1), public and private financial opportunities will be identified for the upscaling of successful interventions as described in the guidelines developed under Output 3.1.2 in the priority areas identified under Output 1.1.1. The financial opportunities to be explored will include private donor, government funding, NGOs and other organisations at the local, national and international scales. For private sector funding resources, opportunities for the creation of incentives for the adoption of sustainable natural resources management practices and taxation systems that promote sustainable practices will be explored. Initial activities towards mobilizing identified financial resources will be supported. The aim will be to generate momentum to a development path for the Biban mountain range that improves the socio-economic situation and improves the natural resource base and ecosystems.

Outcome 3.2: Project monitored and Project results captured and lessons learnt widely disseminated.

- Indicator: An M&E plan and a communication strategy developed and implemented
- Target: 1 M&E Plan, 1 Strategy.

This Outcome will identify and disseminate lessons learned and best practices, and it will support full communication. There will be three outputs:

Output 3.2.1 Project Monitoring & Evaluation plan developed and implemented.

Performance monitoring of the Project will rely essentially on the M&E system. The M&E system – to be developed during the PPG phase - will specify indicators at the impact, outcome and output levels. It will list the activities to be performed, the methodology, and it will clarify the roles and responsibilities of partners and stakeholders. The monitoring and evaluation system will also cover the GEF BD and LD tracking tools. Indicators will be gender sensitive, or a specific gender indicator will be developed.

Output 3.2.2 Project Mid-term and Final Evaluations undertaken.

Output 3.2.3 A Communication Strategy developed and implemented.

This Strategy will facilitate the strategic dissemination of the Project's best practices and lessons learned. It will also create linkages with regional and global lesson learning processes, for example by linking to the FAO Global Forest Resources Assessments (FRA) and the FAO/Global Forest and Landscape Restoration Mechanism. Multi-media products to raise public awareness and public appreciation of forests (e.g. video, website, posters etc.) may also be developed.

4) Alignment with GEF focal area and/or Impact Program strategies

The project is mainly aligned with two GEF focal areas: Biodiversity and Land Degradation. In the Biodiversity Focal Area, the project will contribute to achieving Objective 1 "Mainstream biodiversity across sectors as well as landscapes and seascapes" specifically the first GEF-7 entry point "Biodiversity Mainstreaming in Priority Sectors" (BD1-1). Indeed, the spatial and land-use planning to be undertaken in the two targeted communes under Component 1 that will integrate biodiversity and ecosystems protection will directly contribute to biodiversity mainstreaming in rural development in the targeted communes. The awareness-raising interventions to be implemented under Component 3 for decision-makers, planners and government technical staff across

the Biban mountain range will also contribute towards BD1-1. Similarly, the biodiversity-positive business plans to be supported by the project will promote a shift towards improved production practices in the targeted communes under Component 2 and across the Biban mountain range under Component 3. The supporting by laws to be created under Component 1 will also support improved practices for the management of biodiversity, ecosystems and land in the Biban mountain range.

Under the Land Degradation focal area, the project will contribute to LD1-1 “Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM)” and LD1-4 “Reduce pressures on natural resources from competing land uses and increase resilience in the wider landscape”. Regarding LD1-1, the project will support the improvement of land-use practices – including through promoting agroecology – to increase, restore and maintain ecosystem services, diversify and increase food production, support sustainable livelihoods, and increase resilience to climate change. The project will also support integrated land-use planning and promote SLM and SFM practices in the targeted communes to address unsustainable practices such as fires, over-grazing, agriculture encroachment on forest, over-harvesting of forest products, and logging. This will enable to sustain and improve productive areas, increase resilience to climate change including droughts, and increase the availability of sustainable economic opportunities of the Biban area which will reduce rural exodus. As a result, further degradation of natural resources will be avoided and land rehabilitation will be promoted thereby contributing directly to LD1-4.

5) Incremental cost reasoning and expected contributions from the baseline, from the GEF and co-financing

Component 1: Creating positive attitudes towards biodiversity and forest ecosystems, and preferences for biodiversity positive development, sustainable land management and natural resources conservation.

Baseline and co-financing: The baseline consists mostly of the investments through the two Wilaya governments in rural development of the two communes including through the development of an intercommunal technical centre in the targeted area for the Department of Environment of Bordj-Bou-Arreridj (USD2,520,000), as well as the planned environmental studies (USD84,000). This includes forestry support programmes, water resources investments, agricultural technical support interventions and environmental protection. In addition, FAO, through project GCP/RNE/009 (Implementing the 2030 Agenda for Water Efficiency/Productivity and Water Sustainability in NENA) will be developing water efficiency frameworks and tools that are applicable in the two communes. This is estimated to be the equivalent of USD255,000 from FAO (see co-financing table). Total co-financing is USD2,859,000.

GEF support and financing: GEF support will first increase knowledge available on the natural resources of the Biban range and raise awareness on these resources and their role amongst key people. Broad awareness raising of the population of the population in the targeted communes will also be undertaken. It will then develop medium-term management plans in a participatory manner. All the knowledge, plans and commitments will then be institutionalized in local laws and/or protocol – a contractual agreement between local people, local officials and national agencies. Finally, for each commune, a committee will be established to oversee implementation of the plans. GEF support to this Component is USD380,000.

Component 2: Enabling local resource users to adopt sustainable sources of income that contribute to conserving biodiversity and reversing land degradation.

Baseline and co-financing: The baseline support is (i) MEER investing in waste management in the targeted Wilayas (USD6,300,000); and (ii) in youth employment creation through ANSEJ at the communal level in Teniet En Nasr (USD USD689,484) and in agricultural development in both communes (USD501,871). The total estimated cofinancing from decentralized government is USD7,491,355. INRAA and INRF investment is the development of olive, dates, carob and crops production in the targeted area is also considered as cofinancing for the on-the-ground interventions of Component 2 (USD12,584,000). FAO is also investing in technical support projects that will be contributing to project component 2. TCP/ALG/3603 promotes organic olive oil production in Algeria, and projects ALG/3701 and ALG/3702 develop agricultural value chains, diversifying livelihoods in a sustainable way. The FAO co-financing to this component is $306,000. Total co-financing is USD20,381,355.

GEF support and financing: GEF support develops the pragmatic capacity to build businesses that generate profit and conserve natural resources. A technical support system will be established, this support will then assist MSMEs to develop business plans. The project interventions will then help, directly or indirectly, to initiate the business development – taking care to not undermine financial or economic sustainability. GEF support to this Component is USD2,010,248.

Component 3: Replicating and upscaling successful approaches across the Biban mountain range.

Baseline and co-financing: MEER will provide support to Outcome 3.1 under this Component, providing project support, technical support to all replication, coordination across all actions, and ensuring the Project is firmly anchored and replication through government programmes. MEER support in the communes regarding communication infrastructures and awareness raising for environment protection provide support to GEF-funded project interventions (USD1,780,800). Through the project GCP/RNE/009, FAO is developing a nationwide approach to sustainable management and efficient use of water resources, contributing to Outcome 3.1. In total FAO contribution is estimated at USD245,000. FAO will also provide support for upscaling of the interventions through using its platform and networks for knowledge sharing. Total co-financing is USD2,025,800.

GEF support and financing: GEF support will compile the successful approaches and practices from Components 1 and 2 and facilitate their replication and scaling out across the Biban mountain range including through the identification of public and private funding sources to support scaling out, thereby indirectly contributing to sustainable land management and biodiversity conservation across the entire Biban mountain range. GEF support to this Component is USD750,000.

6) Global environmental benefits

Biodiversity Components 1 and 2 will directly ensure that approximately 16,000 hectares of biodiversity rich Biban forest ecosystem is placed under sustainable management regimes, and thereby securing biodiversity conservation. This includes Holm forests which are currently declining because of fire, overexploitation and mismanagement. Holm forests in Algeria represent 11% of all holm forests in the world[20]. In addition, among the tree species found in the Biban mountain range, Prickly Cedar *Juniperus oxicedrus* is considered as threatened in Algeria[21] and Atlantic Cedar *Cedrus atlantica* is classified as endangered by IUCN and is endemic to Algeria. Increased knowledge on the biodiversity of the mountain range and biodiversity hotspots mapping under Output 1.1.1 will also contribute to its conservation. The Biodiversity and Land Management Plans prepared will significantly contribute to biodiversity conservation through the direct implementation of interventions to promote biodiversity, improved natural resources management practices and/or undertake land restoration. Component 3 will facilitate the replication and dissemination of the successful practices that promote biodiversity and sustainable land management across the Biban mountain range. This could potentially extend the impacted forest area from 16,000 ha to up to 100,000 hectares of forests – although not all 100,000 ha have globally significant biodiversity.

Aichi Targets: The following table illustrates to which Aichi targets the Project primarily contributes.

Aichi Target	SMART Indicators	How the Project contributes
1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	The 19,500 inhabitants of Ighil Ali and Teniet En Nasr communes are aware of the value of biodiversity and the steps they can take to conserve and use it sustainably. The Project will also (under Component 3) raise awareness of the public across the Biban mountain range – a total population of over 100,000 people.	The Project will work with the population in the two communes, so that local people are able and committed to conserving forest biodiversity.
2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	The development strategies for Ighil Ali and Teniet En Nasr communes are biodiversity friendly and include biodiversity conservation measures.	The Project includes consultation and planning at the commune level, to mainstream biodiversity concerns into rural development in two communes. Interventions to promote integration of biodiversity and land management issues will also be undertaken across the Biban mountain range under Component 3 through knowledge sharing on best practices and awareness r

		aising. The project will also contri bute to increase the financial reso urces allocated to biodiversity po sitive interventions.
5: By 2020, the rate of loss of all natural habitats, including forests, is at least hal ved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	The rate of loss of Biban mountain range forest is reduced by 60% at le ast.	All project interventions will contri bute in the short- to medium-term towards halting and reversing the loss and degradation of forest ec osystems in the Biban mountain r ange.
7: By 2020, areas under agriculture, aqua culture and forestry are managed sustai nably, ensuring conservation of biodivers ity.	By project end, approximately 32,00 0 hectares of land including 16,000 forest, 6,000 rangelands and 10,00 0 agricultural land should be mana ged sustainably, ensuring conserva tion of biodiversity.	This is a major focus of the projec t. As a result of Components 1 an d 2, 32,000 ha of agricultural, rang e and forest land will benefit from improved management practices which will promote biodiversity.
11: By 2020, at least 17 per cent of terres trial and inland water, and 10 per cent of coastal and marine areas, especially are as of particular importance for biodiversi ty and ecosystem services, are conserve d through effectively and equitably mana ged, ecologically representative and well connected systems of protected areas a nd other effective area-based conservati on measures, and integrated into the wid er landscapes and seascapes.	N/A	The project will investigate opport unities for the creation of protecte d areas in the targeted commune s/Wilayas to increase continuity i n the network of Protected Areas.

Land Degradation

Components 1 and 2 will directly ensure that approximately 32,000 hectares of including 16,000 forest, 6,000 rangeland and 10,000 agricultural ecosystems are brought into sustainable management regimes, thereby reducing land degradation and securing the conservation of the land and water resources as well as ecosystem functioning. Component 3 will facilitate the replication and dissemination of the successful practices to all the Biban mountain range, and this could potentially reach 100,000 hectares.

Climate change mitigation

Sustainable forest management will contribute increased vegetation cover and carbon sequestration therefore to climate change mitigation. This potential will be explored further during the PPG and during the project implementation.

Sustainable Development Goals

This project will contribute to the Sustainable Development Goals (SDG) and in particular to Goal no 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss. The Project will also contribute towards achieving the following SDGs:

Goal 1: End poverty in all its forms everywhere. The project focuses on poor and marginal communities. It will support the adoption of sustainable, income-generating livelihood thereby and helping to bring a number of people out of poverty.

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture. The project will promote the sustainable management of forest ecosystem goods, including edible species, and it is anticipated that several thousands of people will benefit from this. It will also support livestock and agricultural development.

Goal 5: Achieve gender equality and empower all women and girls. The project will promote women participation in decision making and will support women in adopting sustainable, income-generating activities.

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all. Component 2 of the project focuses on developing sustainable, nature-based, income-generating activities for local people in the Project area.

7) Innovation, sustainability and potential for scaling up

Innovativeness

This project contains several aspects which are innovative for Algeria. Firstly, this Project is an integrated development and conservation project. This integrated approach is new in Algeria (although GEF is supporting two others in different regions, with different people and different ecosystems). The management of forest resources for example is not considered in current environmental, agricultural or tourism policies[22]. The project will aim to promote collaboration across agriculture, forestry, tourism, enterprise development and environmental protection sectors for the sustainable management of natural resources at the landscape scale. This cross-sectoral approach is innovative in the country. The project will further contribute to the collaboration of a diversity of stakeholders involved in the same landscape through the creation of a platform of cooperation between research, government and communities to support and maintain the sustainable management of land and forest ecosystems in the Biban mountain range.

Due to the civil conflict in the 1990's, development and natural resource management practices generally are some decades behind other countries. The most important innovative aspect of the project is its participatory approach, as this remain very unusual in Algeria where the business-as-usual approach is top-down. Therefore, in addition to promoting cross sectoral and participation of different levels of government, this project is innovative in its overall participatory approach to planning and management that will increase the linkages between and within local communities and ensure that communication and learning occurs horizontally thereby promoting communities' ownership and empowerment.

The way this project approaches forestry where forests are managed as an ecosystem rather than as stands of individual trees is also relatively innovative in the country. To date, ecosystem goods and services have not been considered in natural resources management planning, and resources have therefore been managed separately. The ecosystem approach is just starting to gain interest in Algeria, with the recent development of the National Strategy of Wetland Ecosystems Management. The GEF-funded project will promote this new approach in Algeria. Similarly, there is very limited experience regarding the agroecology approach in the country. The interventions for improved agriculture sustainability, diversity and productivity through agroecology under Outcome 2 will provide new evidence base on the potential of agroecology to improve simultaneously ecosystem functioning, food production, livelihoods, and climate resilience in Algeria.

Sustainability

The project places a great emphasis on empowering local communities to be able to assess their situation, analyze their problems, develop appropriate solutions with a reasonable amount of exterior technical support and implement solutions. This approach should develop the individual, technical and social capacity within the two targeted communes to sustain the project's outputs over the coming years. The project also places an emphasis on generating revenue for rural communities and natural resources users that are economically and financially sustainable and depend on healthy ecosystems. This is a major aspect of the sustainability strategy of the project. In addition, it will be ensured that local authorities and local associations are adequately involved in the project throughout the implementation phase and have the required capacity to provide technical support to local communities if required after the project to enable the maintenance of the project outputs.

At the national level, two important factors suggest the Project's results will be sustained: (i) the strong commitment and willingness to learn in the environment and forestry sectors, in particular in the MEER and the Department for Forests (DGF), ensures they are committed to carrying on the results; (ii) the national economic situation in which the development of alternative streams of revenue in rural areas has become critical; and (iii) the strong alignment of the project with multiple national policies and strategies.

Scaling-up

Components 1 and 2 establish an approach to sustainably manage forest and land resources in the Biban mountain range, with a focus on community-led initiatives within two specific communes. The Biodiversity and Land Management Plans to be development at the communal scale will promote the replication of successful interventions across these communes. For example, the zoning exercise will identify priority areas for – as examples – agroforestry development, livestock development, reforestation, ecotourism development and/or woodlot establishment. The GEF-funded interventions will cover parts of these areas. The remaining areas will therefore be preidentified for the allocation of future funding sources. Furthermore, the approach will be designed to be replicable to other similar landscape within the Biban mountain range. Component 3 of the Project is entirely devoted to replication and upscaling successful practices. Component 3 focuses on developing the mechanisms and capacity to replicate the interventions implemented in the two pilot communes across the Biban mountain range. These mechanisms are notably: (i) the intercommunal Biban mountain range Biodiversity Platform, which will provide the institutional drive and energy for replication; (ii) the increased knowledge of the role of biodiversity and ecosystems, which will generate a broad desire to replicate; (iii) the map and inventory which will provide much of the technical guidance on where to replicate, and where to prioritize, and how to replicate; (iv) the guidelines, which complement the priority mapping exercise and provide clear guidance to all parties on what to develop and where, and; (v) the efforts to mobilize additional financial resources, as needed for upscaling of the project interventions.

[1] Ministère des Resources en Eau et de l'Environnement, 2016. Synthèse nouveau Modèle de Croissance Économique Algérie Horizon 2035.

[2] *Wilaya* is the first administrative sub-division of the country.

[3] BNEDER, 2008. Etude relative à la Caracterisation et la Delimitation des Monts des Biban.

[4] FAO/Government of Algeria, 2016. Sustainable and Integrated Development of the Biban mountain range; and BNEDER, 2008. Land-Use Plan and Priority Programmes and Maps.

[5] Bensadek, 2016. Diagnostic / État des lieux du tourisme au sein du massif montagneux des "Bibans".

[6] MEER, 2016. Algeria's Stratégie et Plan d'Action Nationaux pour la Biodiversité (NBSAP) 2016-2030

[7] DGF, 2016. Stratégie du secteur des forêts à l'horizon 2035, Algérie.

[8] Benhouhou, Salima & Yahi, Nassima & Véla, Errol. (2018). Algeria – Chapter 3 "Key Biodiversity Areas (KBAs) for plants in the Mediterranean region".

[9] DGF, Ministry of Agriculture and Rural Development, 2014

[10] Bneder, 2008. Etude relative à la caractérisation et à la délimitation des Monts de Bibans. Phase II : Analyse prospective de l'état des lieux du massif montagneux des Bibans.

[11] FAO/Government of Algeria, 2016. Sustainable and Integrated Development of the Biban mountain range.

[12] DGF, 2019. Problématique des incendies de forêts en Algérie.

[13] Ministry of Land Management and Environment, 2014

[14] Ministry of Water Resources and Environment, 2016

[15] Ministry of Land Management and Environment, 2014

[16] Source: information provided directly by Wilaya Government

[17] «Silva Mediterranea – Partenariat collaboratif pour les forêts méditerranéennes» and «Adaptation au changement climatique des politiques forestières dans la région MENA »

[18] Babors National Park was created in April 2019. It covers a surface of 23,656 ha including 11,909 ha, 7478 ha and 4,269 ha in the Wilayas of Sétif, Béjaia and Jijel respectively.

[19] The production of essential oils for example was identified as an important economic opportunity to be developed in Algeria. See Ali Daoudi, 2016. “Development of NWFPs-based rural microenterprises-Algeria”

[20] GIZ, 2014. Analyse d’identification des chaînes de valeur des produits forestiers non-ligneux en Algérie. p100.

[21] FAO, 2012. L’état des ressources forestières mondiales: Rapport National Algérie.

[22] DGF, 2016. Stratégie du secteur des forêts à l’horizon 2035.

1b. Project Map and Coordinates

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

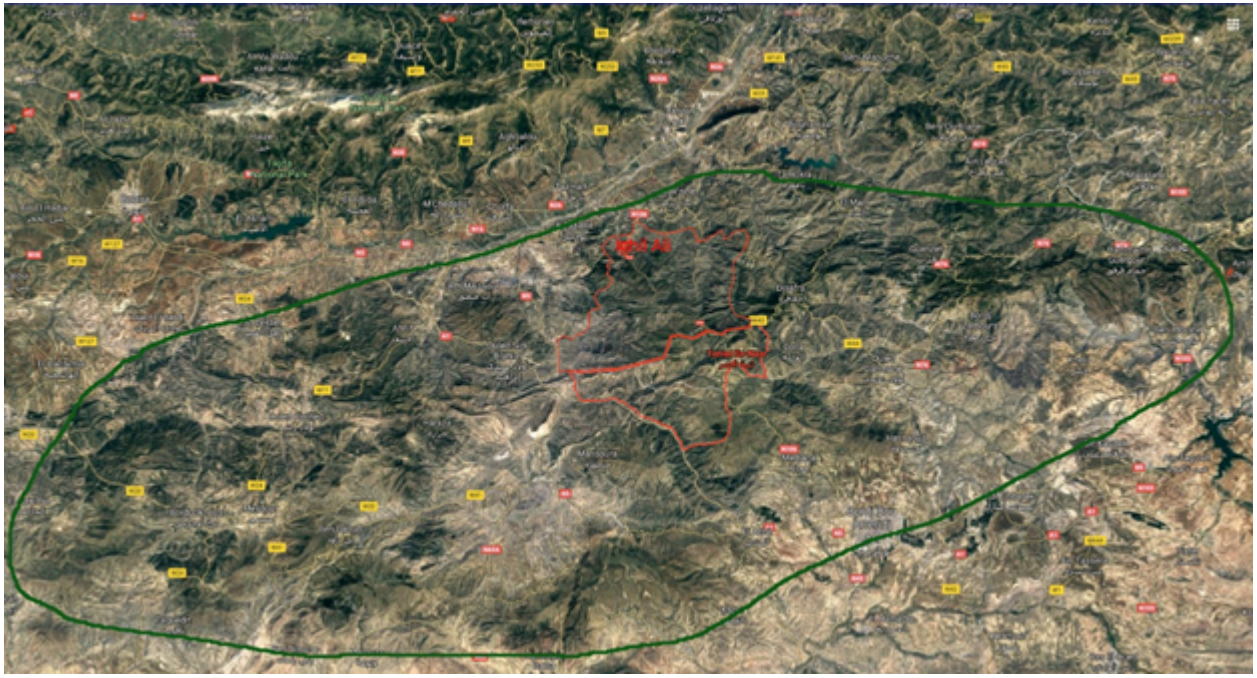


Figure 3: Localisation of the Biban mountain range (in green) and of the two targeted communes (in red).

Ighil Ali communes is located 36° 20' 00" North and 4° 28' 00" East within the Béjaïa Wilaya and Téniet En Nasr commune is located 36° 13' 53" North and 4° 36' 04" East within Bordj Bou Arreridj Wilaya.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities

If none of the above,please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

The proposed project builds upon the consultative and analytical work undertaken through the Project "Sustainable and Integrated Development of the Biban Mountain Range" (TCP/ALG/3501) supported by FAO and the Government of Algeria. TCP/ALG/3501 facilitated a large number of consultations. Several workshops, field surveys and bilateral consultations were held. This included the following stakeholder groups: i) local resources users; ii) local associations with environmental and social objectives; iii) commune level government agencies; iv) Wilaya government, including bilateral meetings with the two concerned Governors (Walis); and v) national and international experts on biodiversity, tourism, development and urban pollution[1]. An extensive consultation process including public and private sector actors from the national to the local scales will be conducted during the PPG phase.

The sub-department for the Protection and Valorisation of Mountain, Steppe and Desert Ecosystems (DPVMSDE) – under the Department for the Preservation and Conservation of Biodiversity and Ecosystems of the Ministry of Environment and Renewable Energy (MEER) – will take the lead in Project implementation and coordination. The following stakeholders and stakeholder groups have been identified as key partners for the implementation of the project:

Stakeholder	Likely role
Ministry of Foreign Affairs (MoFA)	As the GEF Political focal point, MoFA will be involved in monitoring and follow-up. MoFA is also the UNFCCC focal point.
MEER	As the GEF operational focal point and the CBD focal point, MEER will notably be involved in project monitoring and follow-up. In addition, various MEER departments will (i) technically support project activities; (ii) benefit from capacity building under the Project; and (iii) promote Project outputs.
DPVMSDE, under MEER	DPVMSDE will be in charge of project coordination, mobilising project inputs, managing project activities, promoting project outputs including strengthened national policies and plans.
The Department for Awareness raisi	This department will be involved in the planning and implementation of awa

ng, Education, and partnership for Environmental Protection, under MEER	reness-raising interventions on the role of natural ecosystem, the importance of biodiversity, current threats, and the effects of land and ecosystem degradation at the social, environmental and economic levels under Output 1.1.3 and 3.1.3.
General Department for Forests (Directorate-General of Forests, DGF) and Forest Conservation Officers in the two targeted Wilayas, under the Ministry of Agriculture, Rural Development and Fisheries	As the vast majority of forests and forest land in Algeria are state owned, the General Department of Forest is in charge of forest management across the country. At the national level, the General Department for Forests (Directorate-General of Forests, DGF) is responsible for forest policy and for national forest programmes, and for providing supervision and guidance to forest actions at the national scale. Next, at the Wilaya level, the Forest Conservation Officer (*Conservateur de Forêts*, CF) is responsible for forest and forest programmes. Within the Wilaya, the forests are divided into Forest Wards (or *Circonscriptions*), and Forest Wards are divided into Plots (*parcelle*) and sub-Plots (*sous-parcelle*). DGF will be responsible for (i) providing resources to forestry programmes; (ii) technical advice on forestry and (iii) replication of good practices and approaches. DGF will also benefit from capacity building and knowledge sharing under this project.
Stations of the National Institute for Forest Research (INRF) and the National Institute for Agricultural Research (INRAA) in Ighil Ali and Teniet En Nasr Wilayas, under the Ministry of Agriculture, Rural Development and Fisheries	INRF will provide technical support to fill in data gaps in forestry, biotechnologies and reforestation. Similarly, INRAA will assist with scientific information on agrobiodiversity, local agricultural knowledge and family-based agricultural activities.
Ministry of Agriculture	The Ministry of Agriculture will ensure that production areas buffering the forests are sustainably managed to secure biodiversity conservation, whilst contributing to sustainable livelihoods for the communities.
National Agency for Promoting Youth Employment (ANSEJ), under the Ministry for Work, Employment and Social Security.	ANSEJ is a co-financer of the project and will be involved in project planning and implementation. ANSEJ will also benefit from capacity building, and from the income-generating opportunities developed through this project.
Ministry of Tourism and Handcrating (National Agency for Tourism Develo	The Ministry of Tourism and Handcrafting and decentralized offices will support the design and implementation of: i) ecotourism activities; and ii) hand

pment, and Chambers of Craft and Trade in Bejaia and Bordj-Bou-Arreridj Wilayas)	crafting activities based on the sustainable exploitation of forest resources and the strengthening of the corresponding value chains (Component 2 of the project).
Ministry of Women and Culture	The Ministry of Women and Culture will be first consulted at PPG phase for the design of interventions that will specifically benefit women and to ensure that the project intervention promote the preservation of traditions and culture in the targeted Wilayas. At implementation, collaboration with this Ministry will be useful to maximise the participation of women in the interventions and the benefits raised for women.
Various national Ministries, notably those responsible for: Housing and Urban Development, Water resources management, Rural Development, Higher Education and Scientific Research, and Trade.	These ministries will be engaged with for different activities of the project such as local development planning process and the design of the revenue generation activities from forest goods and services. The details regarding their involvement will be defined during the PPG phase.
Universities and expert institutes	Universities will provide technical support to the Project. The details to be determined during the PPG.
Other national agencies (National Agency for Micro-credit Management, National Agency for Youth Employment, National Fund for Unemployment Benefit)	The agencies will be involved in all activities aiming at increasing revenue and capacity building for local people. They will be involved as partners and in providing technical support. This will cover (i) activities that generate revenue from sustainable use of forest resources and (ii) activities that create alternative livelihoods.
NGOs, Regional and Local Associations in the natural resource management sector (at the national, Wilaya and communal level)	NGOs and local associations will be involved as partners to facilitate engagement with local communities and provide technical support for the implementation and maintenance of on-the-ground project interventions.
Offices of the Gouraya, Djurdjura and Babors National Parks	The knowledge and experience of the management offices of these National Parks regarding fauna and flora inventories and monitoring, ecosystem functioning, working with the surrounding local communities, training of local authorities and local communities, and traditional use of natural resources will be highly valuable for the project implementation.
National Agency for Nature Conservation (Unit for Conservation and Development of Béjaia) under the Ministry of Agriculture, Rural Development	This Agency will provide technical support regarding ecosystem preservation and rehabilitation, and conservation of national flora and fauna, particularly threatened species and species of high economical, social or scientific value.

and Fisheries	
Private sector companies involved in tourism, or the commercialisation and marketing of forest or agricultural products	Private sector companies at the national and local levels will be involved in the implementation of the interventions under Component 2 particularly for the development of income-generating activities based on the sustainable use of natural resources. The engagement of the private sector will be threefold: their experience will be valuable for the development of profit-making business plans, the opportunities offered by their businesses will guide the selection of the products, value chains and/or services to be developed, and potential business partnership and/or investors will be seeked for with private sector actors.
Local communities	The population in Ighil Ali and Teniet En Nasr communes have been involved in the design of this PIF and will be further consulted during the PPG phase for the fine-tuning of the interventions. They will be engaged in the project as the main project partners throughout the implementation phase for the planning and implementation of on-the-ground activities. They will be the final beneficiaries of all project interventions including improved governance and planning, awareness raising, training, income-generating interventions as well as biodiversity conservation and ecosystem restoration interventions. Village comities (Djemaa) will play an important role in the project for the development of the management plans and the enforcement of adopted decisions and rules. These structures will facilitate mediation and participatory decision-making processes within villages.

[1] FAO/Government of Algeria, 2016. Sustainable and Integrated Development of the Biban mountain range.

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

Women enjoy the same civil and political rights as men and have the status of full citizens under the Algerian Constitution. Algeria has ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1996 but it has not ratified the Optional Protocol on violence against women. Overall, Algeria's latest global ranking is 128 out of 149 for all gender equality index[1]. Economic participation and opportunities for women are particularly low in the country which ranks 132 out of 149 countries assessed with a score of 0,452. Women find it challenging to enter into decision-making positions. For example, central government staff is made of 14% of women and there is only 30% and 21% of female members at Wilaya- and communal-level committees respectively[2]. Limited involvement of women in decision-making is also expected to be prominent in rural areas. Particular attention will be given to women participation in the project and closer collaboration will be established with Ministry of National Solidarity, Family and Women as well as gender-focused UN organization to develop and implement the best approach possible for women participation and empowerment through the project.

The targeted area of the project is part of the Berber-speaking region. Within Berber communities, women play a key role in natural resource management, especially of forest ecosystems. Women are mostly responsible for harvesting NTFPs, including medicinal plants. Women's know-how about medicinal and aromatic plants (recognition, use, preparation) is important and needs to be safeguarded and promoted. Further, many women have skills and are involved in the packaging, processing and storage of NTFP products (mushrooms, honey, nuts, oils, etc.). Handcrafting such as weaving, pottery and carpet making is also generally undertaken by women. In addition, women are responsible for the education of children, for maintaining social relations with neighbors and relatives. Therefore, they are a particularly important target for the awareness raising interventions for the protection of natural resources.

Gender-sensitive indicators have been developed at PIF stage and will be further integrated in the full project results framework during the PPG phase to ensure that particular attention is given to female beneficiaries. Based on the preliminary analysis undertaken for PIF development, the project will aim to benefit at least 40% of women across all activities including for the development of entrepreneurial skills and businesses under Component 2. A more thorough analysis of the gender situation specifically in Ighil Ali and Teniet En Nasr will be undertaken during the PPG phase and gender segregated data will be collected. This will lead to a more thorough understanding of the situation regarding gender. It will also lead to (i) the mainstreaming of gender into project activities and (ii) the identification of any specific activities to support women or address gender issues. As a result of this, a strong gender perspective will be incorporated into the project in order to address the needs and priorities of women while enhancing their opportunities for full inclusion in the planning and implementation of sustainable forestry initiatives. Cultural sensitivities with regard to gender relations will be taken into consideration at all points.

[1] The Global Gender Gap report, 2018. World Economic Forum, Geneva, Switzerland.

[2] ONU FEMMES, 2015-2016. Rapport d'activité ONU femmes Maghreb.

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

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

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

Private sector companies at the national and local levels will play a major role for the implementation of the interventions under Component 2 for the design and implementation of business plans based on the sustainable use of natural resources. For example, the project will target private sector companies whose businesses focus on tourism and ecotourism (e.g. accommodation, catering, travel agencies), and/or agriculture and forest-based products (e.g. Enterprise BOUBLENZA which is a leader in the exportation of carob products, Enterprise SOUMMAN specialised in livestock products, IFRI specialised in natural oils), and investors. The experience of these companies in the commercialisation of nature-based products will be built on for the development of sustainable business plans. In addition, their business activities will be analysed to assess the demand for nature-based products and services, and develop sustainable income-generating interventions in the targeted communes. Partnership between local community groups and private companies will be developed where appropriate. Private sector partners will also be engaged with for the identification of financial opportunities for the upscaling of successful project interventions across the Biban mountain range. Opportunities for engagement of specific private sector actors in the project will be closely examined at PPG stage.

5. Risks

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

Risk	Rating	Risk Mitigation measures
Security issues lead to delays in activities and undermine efforts to develop sustainable activities (notably leisure and tourism).	Medium	Leisure and tourism are the main activities that may be affected by insecurity. If the security situation deteriorates, over the short-medium term the emphasis will be placed on other economic activities that are less affected by insecurity. However, this is a low risk because security has improved greatly in recent years and the government is committed to maintaining security.
Decreased project ownership and support from governmental agencies	Low	MEER and Wilaya government agencies are currently very supportive. To maintain this support, they will continue to be fully involved in the project preparation and in the project implementation and management. The project design takes into consideration the need to achieve results in the short-term in order to demonstrate the relevance of the project objectives, results, and activities to local and national governmental agencies. The alignment of the project with national strategies and policies is also a strong warrant of government commitment in the project.
Climate change may lead to increased threats to forest, through fire, pests, diseases and changing climatic conditions (temperature, precipitation).	Low	Current and future climate conditions will be taken into account when designing the on-the-ground interventions as it is a condition for the sustainability of the project inputs. As an example of this integration of climate resilience in the project, a key selection criteria for the species to be promoted by the project will be their resilience to current and future climate scenarios.
Local communities do not benefit adequately from the sustainable	Med	Ultimately, the population in Ighil Ali and Teniet En Nasr must take the lead in sustainably managing l

economy and lose interest in the Project.		ocal forest and agricultural resources in order to c onserve land and biodiversity. This will only happe n at a significant scale if the population sense cult ure, economic or other benefits. This change in att itude might take some time. To address this risk, t he project is designed to make great efforts to (i) promote activities with rapid returns within the pr oject lifetime; (ii) raise awareness on the long-ter m objective and benefits, and; (iii) work closely wit h local opinion leaders.
Low involvement and participatio n of local institutions in planning and monitoring mechanisms.	Med	The project will encourage local participation, em powerment and ownership by supporting multi-st akeholder and participatory processes for the dev elopment and coordination of project activities. L ocal authorities will be strongly involved in every s tep of the project and their capacity will be built. B ecause of the project alignment with the national policy framework, the project interventions fall un der the mandate of local authorities in each releva nt sector. This should strongly contribute to the m aintenance of the commitment throughout the pro ject.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

The MEER will be the lead project execution agency and will be responsible for overall execution along with other national partners. FAO, will provide the necessary quality assurance and technical oversight as the GEF Implementing Agency. Nevertheless, MEER capacities will have to be assessed and FAO's due diligence to assess fiduciary risks associated to transferring GEF resources to MEER will have to be undertaken in line with provisions of the GEF Minimum Fiduciary Standards. The intention is that MEER will act as executing agency and if that will not be possible, as a result of the fiduciary assessment, third non-FAO parties will be considered for execution. In such case, GEF SEC will be consulted early on in the PPG process on the best recommended execution modality.

The MEER will be directly responsible for the coordination of the project and will ensure effective articulation with national and local partners and initiatives . FAO will support coordination with international partners and initiatives and will ensure appropriate linkages are made with biodiversity, forestry and land management initiatives in other Maghreb and Mediterranean countries.

To assist coordination, a national Project Technical Committee (PTC) will be established. Membership of this PTC will include MEER, DGF, FAO and technical experts. The role of the PTC will be: (i) to review and comment on workplans and terms of reference; (ii) to mobilize stakeholders and resources to project activities; (iii) to review and comment on draft outputs and; (iv) to share information and facilitate joint planning of activities. The PTC will be supported by a Project Management Unit, and one staff member will be responsible for supporting coordination.

The Project will notably be coordinated with the following GEF projects:

· Rehabilitation and Integrated Sustainable Development of Algerian Cork Oak Forest Production Landscapes. This project will start in 2020 with a budget of USD 3,411,644. It will be implemented by FAO and DGF. It will address the causes of the reduction of oak production which include fires, overexploitation and inadequate forest management, through promoting the sustainable management of oak forests and reforestation. The objective of the project is to demonstrate and upscale sustainable management and harvesting practices as well as conservation interventions in Algeria's cork oak forest ecosystems. The project focuses on the communes of Beni Idder (Wilaya Jijel), Taourir Ighil (Wilaya Béjaia) and Hafir (Wilaya Tlemcen).

· Conservation of Globally Significant Biodiversity and Sustainable Use of Ecosystem Services in Algeria's Cultural Parks. This project, implemented by UNDP, started up in 2012 and will run until 2021. The experience gained by this UNDP project regarding biodiversity protection and parks management will be built on for the implementation of the GEF-funded project. Linkages and complementarity will be developed where appropriate ($5.4 million GEF grant).

· Developing a National Strategy and Legal and Institutional Framework on Access to Genetic Resources and Related Benefit Sharing and Traditional Knowledge in Line with the CBD and Its Nagoya Protocol in Algeria. This project, implemented by UNDP, started up in 2016 and is implemented by the DGF. Working linkages will be developed where appropriate ($1.9 million GEF grant);

· The UNDP/GEF Small Grants Programme (SGP). The SGP started operations in Algeria in 2012 and includes many local initiatives to conserve biodiversity and improve land management. SGP has already learnt many lessons and developed a strong network, particularly related to participatory approaches. The proposed Project will explore the approach and successes of the SGP and learn from that experience.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assesments under relevant conventions

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

Land use planning

Two of the key national economic policies in Algeria are:

· The policy of “Rural Renewal”, which notably includes the following two programmes: “management and extension of forest land” and “conserving natural ecosystems”. This project has been designed in alignment with these programmes.

· The ‘New Economic Growth Model’, which aims to diversify the economy, notably through the innovative use of natural resources. This has a particular focus on re-energizing rural areas. This project will directly support this policy in rural areas, through the development of activities that generate income and help sustainable manage natural resources and natural eco-systems.

The Territorial Programming Framework of the East High Plateaux (2014) of the Ministry for Land Use Planning and Environment as identified the Biban mountain range as a priority area to be protected and managed because of its vulnerability to natural disasters (i.e. affected by erosion, scarce water resources, social inequalities, population growth).

Biodiversity

Algeria’s NBSAP 2016-2030 constitutes the latest national policy objectives in Algeria. This project contributes directly to several objectives in the NBSAP, as explained through the following table:

NBSAP National Objective	How the Project contributes
12: Protect, conserve and restore ecosystems in order to maintain their equilibrium, ensure their sustainability, and ensure sustainable production of ecosystem services, aiming at the conservation of at least 20% of terrestrial areas, 5% of marine and coastal areas and restoration of natural ecosystems over an area of at least 5 million hectares.	The project will help protect, conserve and restore equilibrium of 16,000 hectares of forests and mountain ecosystems. These ecosystems will be brought under sustainable management regimes, and biodiversity will be conserved.
17: Integrate climate change adaptation approaches (ecosystem resilience, restoration of degraded ecosystems, combating desertification) and prevention of natural hazards and disasters into ecosystem management.	The ecosystems targeted by this project are threatened by climate change. The resilience of the outputs is necessary to achieve sustainably. Climate change resilience will therefore be a prerequisite for all project interventions. By doing so, the project will build the resilience of local communities in the targeted communes. The project will demonstrate and raise awareness on how climate change consideration is central to sustainable natural resource management, and will develop tools and increase capacity for the integration of climate change adaptation into development planning across all sectors involved in the management of natural resources.
19. Investing in natural ecosystems with high added value, in particular to the added value of key biodiversity sectors contributing to the creation of permanent jobs and income for the local populations.	The project will contribute directly to this objective, notably through the entire Component 2. Component 2 is about ensuring that biodiversity conservation, and sustainable natural resource management, contribute significantly to the local economy.

Land degradation

Algeria is one of 14 countries to have piloted the preparation of a National Land Degradation Neutrality (LDN) report. The Algerian LDN report was prepared during 2014-2016 and can be considered the most recent formulation of national policy towards land degradation. This project is in support of the vision of achieving LDN in Algeria, and has been designed to directly contribute to two of the LDN programme objectives out of six. These objectives are:

· Objective 1: “Integrated management of dam watersheds”, with a focus on integrated watershed management upstream of the reservoirs for “the conservation of soils and waters and the improvement of the living standards of the populations”. This proposed project will contribute to this objective in the targeted landscape.

Objective 2: “The National Reforestation Plan”. In this objective, LDN reaffirms the national commitment to re-plant 1.25 million hectares. 750,000 hectares have been planted so far. This project will contribute to this program through promoting increased vegetation cover in the targeted landscape.

Forestry

This Project also contributes to implementing national forestry policy. The Forestry policy in Algeria was updated through the issuance of a Forest Strategy until 2035. The proposed project has been designed to turn this Strategy into action. In particular, it will contribute to the Forest Strategy’s vision which is “to serve the social, economic and environmental needs of the country, creating sustainable employment and income while contributing to improving the resilience of the natural environment to climate change”.

8. Knowledge Management

Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

Knowledge generation and management are integrated throughout the Project's components as follows:

Component 1 includes activities to collect data and information on biodiversity, ecosystems, land, biodiversity loss, land degradation and threats, and the value of these natural resources. It will then make this information available to local people in appropriate formats. This information will be institutionalized through the Management Plans and the bye-laws. This information will be disseminated to the local authorities and local communities in the two targeted communes through the awareness raising activities.

Although the main focus of Component 2 is to improve the biodiversity, the land and the economy in Ighil Ali and Teniet En Nasr communes, Component 2 will also serve as a piloting or a demonstration of sustainable ecosystem management in the Biban mountain range context. Hence, activities under Component 2 will generate knowledge on how to conserve biodiversity whilst improving the land and the economy. In effect, Ighil Ali and Teniet En Nasr will serve as living demonstration sites, and stakeholders from throughout the Biban will be invited to observe and to witness the activities (this latter is financed under Component 3).

Component 3 focuses entirely on replication and upscaling, with knowledge management being a key strategy for replicating and upscaling. Component 3 focuses on upscaling and replicating successful approaches and practices across the entire Biban mountain range. First, under Component 3, a multi-stakeholder Biban mountain range Biodiversity Platform will be established and supported. This Platform will be tasked with disseminating and facilitating the upscaling of the project successes. Guidelines on successful approaches and practices will be developed to facilitate replication. Next, awareness raising interventions for key officials from all communes in the Biban mountain range on biodiversity and land management will be raised. This will be achieved by using the lessons and experience from Component 2. This may be done, for example, by in-country tours, posters, workshops, videos or other appropriate communication means. The project will mobilize funds to replicate the on-the-ground interventions of Component 2 across the Biban mountain range. The emphasis will be on mobilizing public and private sector investments – in order to ensure financial sustainability. Component 3 will also include project monitoring and evaluation – to provide additional lessons learnt for dissemination.

The Project will establish a national project office and national coordination mechanism, the ToR for these will include the active support of knowledge management and lesson learning. In addition, FAO – through its regional and international networks – will ensure a two-way flow of information and knowledge: to Algeria in order to achieve highest technical quality as possible for the on-the-ground interventions, and from Algeria to other countries. For example, FAO is one of the 3 GEF Agencies of The Restoration Initiative (GEF ID 9264) and will therefore ensure full access and exposure to results and lessons from the many child projects within the TRI programmatic approach, addressing similar challenges and barriers.

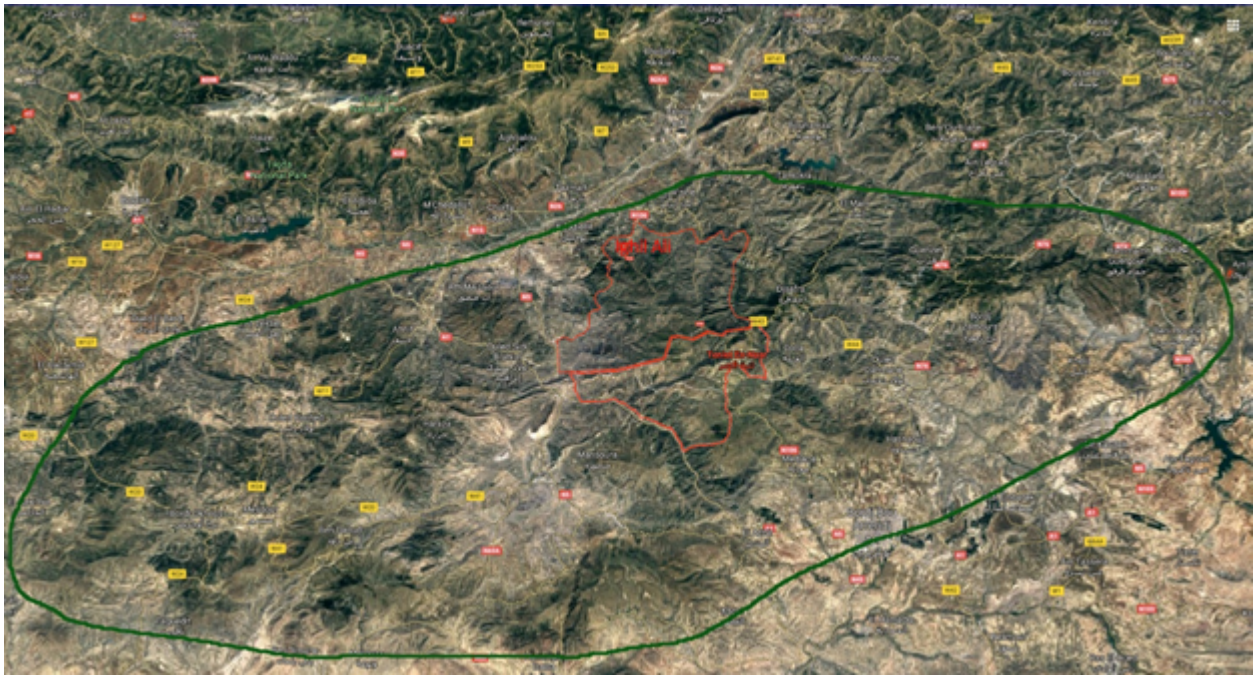
Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Samira HAMIDI	GEF OFP, Inspector General of Environment	Ministry of Environment and Renewable Energy	12/21/2018

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place



Ighil Ali communes is located 36° 20' 00" North and 4° 28' 00" East within the Béjaïa Wilaya and Téniet En Nasr commune is located 36° 13' 53" North and 4° 36' 04" East within Bordj Bou Arreridj Wilaya.