



United Nations Development Programme
Country: Lebanon
PROJECT DOCUMENT

Project Title **Safeguarding and Restoring Lebanon's Woodland Resources**

UNDAF Outcome(s): 2. Rights-based approach to development promoted and implemented 2.3 to improve efficiency in resource allocation and administration for human development

Expected Output(s): An appropriate management framework and management capacities for the safeguarding and restoration of degraded forest areas developed.
A set of innovative technologies and instruments for the rehabilitation of forests and woodlands, and their subsequent sustainable management, designed and validated in pilot areas.

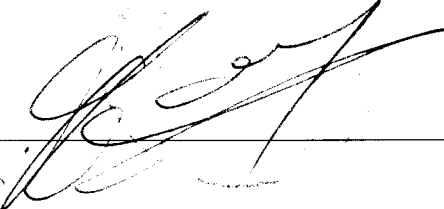
Executing Entity: **Ministry of Environment**

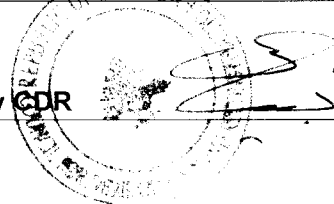
Brief Description

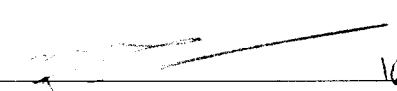
The long-term goal of this GEF funding request is to complement the on-the ground investments undertaken through the National Reforestation Program through the creation of an enabling environment and by building capacity for sustainable land management as a contribution to greater ecosystem stability, enhanced food security and improved rural livelihoods. The rationale is to remove the institutional, economic, technical barriers to Sustainable Land Management in this sector in order to enable National Reforestation Plan to meet its targets and up-scale forestry Sustainable Land Management models and approaches over 20 years at the national scale. The immediate objective is to develop a strategy for safeguarding and restoring Lebanon's woodland resources and assist its implementation through capacity building and execution of appropriate SLM policies and practices.

Programme Period:	2009 - 2013
SRF Outcome 1: Government Compliance with International Conventions promoted	
Atlas Award ID:	00050136
Start date:	15 November 2008
End Date	15 November 2013
Management Arrangements	NEX

Total budget	2,255,000 USD
GEF contribution	980,000 USD
Allocated (in-kind):	
• Government	1,275,000 USD

Agreed by Ministry of Environment  16.12.08

Agreed by CDR 

Agreed by UNDP  16.12.08

Acronyms

CBO	Community-based Organisation
CDR	Council for Development and Reconstruction
EA	(National) Executing Agency
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
GEF	Global Environment Facility
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH
IA	Implementing Agency
ILUP	Integrated Land Use Planning
IPP	Investment Planning Project
LARI	Lebanese Agricultural Research Institute
MDG	Millennium Development Goal
MoA	Ministry of Agriculture
MoE	Ministry of Environment
MSC-IPP	Management Support Consultant – Investment Planning Program Environment
MSP	Medium-sized Project
NAP	National Action Programme to Combat Desertification
NGO	Non-governmental Organisation
NRP	National Reforestation Programme
OP	Operational Programme
PMU	Project Management Unit
POC	Project Oversight Committee
RDNRD	Rural Development and Natural Resources Directorate of MOA
SLM	Sustainable Land Management
SLM-1	Sustainable Land Management Strategic Priority 1 (under GEF-3 OP#15)
SLM-2	Sustainable Land Management Strategic Priority 2 (under GEF-3 OP#15)
SO	Strategic Objective (GEF-4)
SOER	State of the Environment Report (issued by MoE)
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme

I. SITUATION ANALYSIS

1. The mountain chains of Lebanon run parallel to the Mediterranean coast and rise to more than 3,000 m. In ancient times, the country was known for its rich, dense forests; these have been the defining natural asset of Lebanon for millennia. The forest-covered mountains of Lebanon serve in the arid eastern Mediterranean as "water towers" which are crucial to the welfare of a large human population in Lebanon and beyond its boundaries. The preservation of the woodland vegetation cover is a key issue to preserve aquifers and surface freshwaters which are mostly used for irrigation and provision of drinking water.
2. Mediterranean forests have been identified by the *Millennium Ecosystem Assessment* (MEA) as one of the world's most threatened terrestrial ecosystems: Mediterranean forests are one of the two 14 major biomes, of which more than two thirds of the area has been converted (primarily to agriculture), by 1990.
3. It is estimated that 74 % of Lebanon's surface was covered by forests. The cedar forests (*Cedrus libani*) are part of the country's mythology and have been eulogised since biblical times. Cedars are a national symbol, which is e.g. displayed on the country's flag.
4. Brushland dominated by the oak *Quercus calliprinos* and Palestinian pistachio tree *Pistacea palaestina* is the most abundant woodland (see Appendix 2 for details), and is found in some parts of the coastal strip and on the lower reaches of the Mount Lebanon Range. A mixed forest of conifers, mostly *Pinus brutia* and *P. halepensis*, is also found in the west. Most cedars have been cleared and only scattered stands are left today, such as the Arz Ar-Rab Forest near Bcharré, the Tannourine, Barouk and Maaser el Shouf forests. Lebanon has a small area of forest plantations, with *Eucalyptus* spp., *Pinus pinea* as dominant species.
5. Some 65 % of Lebanon's woodland resources have been classified as degraded (see Appendix 2). According to the National Action Plan to combat desertification (NAP), desertification risk is high or very high in 59 percent of Lebanon's surface area. Baalbek, Rachaya and Marjayoun are those *mohafazas* (provinces) with the highest risk (see Appendix 2 for details for all *mohafazas*, and Appendix 4 for a comprehensive Land Use Map of Lebanon).
6. Despite the severe degradation of the vegetation cover caused by human activities, Lebanon's plant diversity is still regarded as very diverse, sheltering an estimated number of 4,200 plant species. This diversity is mostly the result of the physiogeography of the landscape and the country's location at the crossroad between continents.
7. Today Lebanon's natural resources are rapidly becoming depleted. Problems of land degradation and deforestation do not date from the last few decades, but began more than a century ago and are still continuing. It is a long historical process of cutting down trees and not allowing regeneration, over-exploitation of wood, fires, grazing in cut areas and agricultural expansion. As long as forest resources have been abundant, it was always the cheapest way to cut the wood as fire wood or for construction, and to use the cleared land as rangeland or for settlements. However, this highly unsustainable process has finally led to a high degree of erosion and to a loss of productivity of the land.
8. The lack of control and appropriate legislation in the last few years, the growing needs of the population and ignorance of the negative impacts of poor natural resource management have resulted in the present alarming situation. Lowered water tables, soil erosion and changes in unique micro-climate are some of the consequences of this rapid deterioration. A recent study carried out by the World Bank (2004) came to the conclusion that the annual damage costs of soil erosion including terrace degradation is 0.45 percent of the GDP (US\$ 60-90 million per year). The damage costs of forest and rangeland degradation in the Mount Lebanon district alone is estimated at 0.05 percent of GDP per year (US\$ 4-14 million).

Sector Issues

Institutional and Legal Context

9. In the absence of a written forest policy in Lebanon, the *National Action Programme to Combat Desertification* (NAP) prepared by MoA with a major technical and financial assistance from the GTZ and the support of UNDP's Dryland Development Centre (DDC) provides the most important guiding document for land degradation in forest areas and brushland. The NAP was developed following a

participatory approach involving communities of affected areas and concerned stakeholders. This builds on the decentralisation efforts already initiated by the Government of Lebanon. The Government of Lebanon has put in place an institutional framework and is committed to strengthen it further to ensure the implementation of the NAP and the mainstreaming of the UNCCD with the development policies of the various line ministries.

10. The responsibility for forests is mainly shared by the *Ministry of Agriculture (MoA)* and the *Ministry of Environment (MoE)*. MoA is developing laws, regulations and projects in a certain framework, aiming at the conservation, promotion and management of the forest and tree resources and this ministry has the mandate to implement these provisions. MoE has developed and is implementing a national reforestation plan and is responsible for the management of communal lands in coordination with other ministries. Until 1993, when MoE was established, MoA was the unique body in charge of natural resources management, as well as of the preparation and implementation of all the related laws and legislation. During the 1960's and 1970's the MoA has undertaken major projects in various parts of the country. During the years of war, several sites were prepared, roads opened and terraces built. However, no major reforestation/afforestation activities were carried out, because of lack of budget, personnel and political stability. At the end of the war, the MoA's main concern was to restructure itself and build the capacities of the newly recruited guards and engineers. Very little was done in terms of reforestation/afforestation. Within MoA, the *Rural Development and Natural Resources Directorate (RDNRD)* is in charge of the forestry sector, including rangelands and protected forests. The establishment of MoE in April 1993 marks a significant step forward in the management of the environment. In accordance with Environmental Law 444, MoE is in charge of protected areas in general and of the management of public lands which are forested or afforested. In 2001 it was handed the responsibility to prepare and undertake the national reforestation programme. Thus MoE has the mandate and financial means to carry out reforestation measures in all parts of the country.
11. There is no comprehensive forestry law yet, but land degradation and forestry issues are being addressed through laws and regulations which include the protection of natural, archaeological and tourist sites, drinking water, hunting, urban development, mining, food control, and housing. The first forest legislation of Lebanon was issued in 1949, and has been amended subsequently. According to it, any forest exploitation is subject to a permit issued by MoA, even on private lands. All conifer forests and trees are protected by law, and their exploitation is banned, even if they are dead.
12. Lebanon was one of the first countries which conducted a *Forest Resources Assessment (FRA)*, and it was completed in 2005/2006. The approach adopted is statistical in nature; the data was collected from a sample of 250+ plots scattered throughout the country. The assessment revealed that forests cover 139,376 ha or 13.2% of the country, and other wooded land extend over 108,378 ha. The total area covered by forest and other wood land represent about 23% of the country's surface area. Conifer forests cover 43,936 ha, which represents 32% of the forest area, broadleaf forest 77,230 ha (57%) and mixed forests 15,282 ha (11%). Communal and governmental forests extend over 40,000 ha. The output of this project will facilitate future work on, among others, international conventions such as the UNFCCC, CBD, and UNCCD.

Economic Benefits Derived from Forests

13. Lebanon produces modest amounts of wood, mainly for fuel, for which a high demand exists. Only some 2,000 ha of forest plantations exist in Lebanon. These are mostly small stands, patches distributed over the country. Although small amounts of plywood and paper are produced, there is no national forestry industry and the demand for saw wood, plywood and paper is met mainly through imports. The contribution of the forestry sector to the GDP is very low. Precise figures related to wood production do not exist as timber harvesting is illegal and wood quality is very low.
14. Local herders benefit from forests, as they use them for grazing goats inside the forests. Goat meat is a part of the traditional Lebanese cuisine. Forest ranges therefore play a key role in securing sufficient and quality food sources to herders; their sustainability and natural regeneration are however strongly impeded by uncontrolled and over-grazing.
15. Although charcoal production had being banned until recently because of its destructive effect on forest and woodland resources, it has always been practiced throughout Lebanon, and some communities depend on this product. As it turned out that these illegal activities can hardly be controlled, efforts are currently undertaken to establish a legalised system which requires permitting towards improved control.

16. Non-wood forest products are important both locally and commercially. Large amounts of pine nuts from stone pines (*Pinus pinea*) are produced, and MoA has banned their importation in order to support local production. There is an estimated production of 900 tons pine nuts per year, equivalent to US\$13.5 millions. A tax policy is being applied to encourage the production of pine nuts (or pinelets) and many villages in the central mountain region depend on this product for most of their income. Stone pine forests have the major advantage of adapting to a multipurpose management system. Most such forests are fairly open and even-aged, which means that they can be used for grazing or recreational activities, and their undergrowth can be harvested, thus reducing the fire risk. Carob (*Ceratonia siliqua*) production has been encouraged by authorizing owners to clean their forests and graft their carobs with more productive varieties. This allows them to increase their yields and obtain juicier carob pods from which manufacturers make better molasses. Carob seeds are exported and used by several industries.
17. Aromatic plants such as oregano (*Origanum* spp.), bay leaves (*Laurus nobilis*) and several wild leafy vegetables form part of most Lebanese people's daily diet. Crab apples (*Malus trilobata*) are eaten marinated in vinegar. There are 236 species of wild and cultivated medicinal plants in Lebanon. About 16 species are either rare or restricted to certain regions, while 29 are in danger of extinction. The claimed aphrodisiac and curative powers of *Ferrula hermonis* root, which grows on Mt Mekmel in the subalpine zone, has led to its overexploitation, and MoA has reacted by issuing a decree prohibiting the uprooting and harvesting of this commercially important plant.
18. Although ecotourism is growing in Lebanon, it does at present not yet contribute significant returns towards forest-dwelling communities.

Forest Estates and Land Tenure Issues

19. Several tenure systems are applied in the forests in Lebanon. However, cadastre is not always updated and surface areas and boundaries are not always clearly set. The different land tenure systems are the following:
 - The **Mulk** are private lands, owned by individuals, and are usually situated within the boundaries of a municipality.
 - The **Amiri** are lands owned by the state, normally managed by the MoA or MoE, but sometimes their management is transferred to communities. All protected areas are amiri land.
 - The **Macha'a** are communal lands owned by a municipality and managed by the municipal council. The land can be rented to local communities and is mostly used for grazing, but some *macha'a* are forests used for wood production. There is some responsibility of the MoE for *macha'a*.
 - The **Waqf** (endowments) are lands owned by religious communities (often monasteries) or charitable trusts. They are managed by individuals assigned by the group of owners or by the community. Especially some monasteries own some large forest areas in Lebanon.
20. The users of the forest areas are not always the owners. Rentals, usufructs, customs and agreements are used to regulate this system. Forest workers, private rural companies or shepherds may be allowed to use the space under these usage systems.

Threats, Root Causes and Barriers to Forest Sustainable Land Management

(see also Appendix 5 for Threats Matrix)

21. Whereas Lebanon has always been known as a forest-rich country, the process of deforestation and land degradation has already begun in ancient times and is still continuing. Today's forests, woodlands and maquis can be regarded as the remnants of a once much larger vegetation cover. Once an area has been deprived its natural forest cover (for whatever reason), it is rarely replanted, and usually becomes wasteland or rangeland. The lack of rehabilitation of degraded woodland results from a lack of stewardship. Control over the forest resources was weak in particular during the civil war and the years after, and the state begins only now to demonstrate a stronger responsibility.

Threats and Root Causes

22. There are two major groups of threats to the forest and woodland resources of Lebanon:
 - Conversion of forests, woodlands and maquis to other land uses. Lebanon is a densely

- populated country with the bulk of the population living in the urban areas (the urbanisation rate is 90 percent). Large forest areas in Lebanon have been sacrificed for the rapid and often uncontrolled urban expansion, industrial development, and the construction of roads and other infrastructure. The establishment of quarries which cut deep scars into the forest and woodland landscape added further to these threats. Years of unregulated quarrying have left hundreds, probably over a thousand of abandoned quarries across the country. The conversion of forests has led to a complete destruction of the natural and semi-natural vegetation cover in large areas of Lebanon, and thus to a loss of the forest functions. Increased soil erosion, a reduced ability of the soil for ground water retention, and a loss of the function of forests to absorb dust etc. are typical phenomena observed throughout the country.
- Insufficient forest management, which has led to illegal timber extraction, grazing and overgrazing in forests and brushland, encroachment on woodland by agriculture (forest clearances, agrochemicals), intended and unintended forest fires (little prevention measures), uncontrolled charcoal production, and finally forest pests (promoted e.g. by the absence of non-commercial thinning). These factors have induced weak forest stands, a quick erosion of land after forest fires, poor natural regeneration, and a general reduction of forest functions.
23. Rapid and uncontrolled urban expansion has induced a severe reduction of the total forest cover. Uncontrolled urban expansion occurred in particular during the civil war, when many people wished to settle away from the urban centres for security reasons. During these years, land use planning (let alone ILUP) was hardly practiced and the construction of buildings and infrastructure followed a largely uncontrolled pattern; many houses and other buildings have been erected in agricultural and forest land with the consequence of urban sprawl, and finally land degradation. Although the rehabilitation of state structures after the end of the war has made good progress, there are still serious deficiencies in sustainable land use planning and in putting into force available plans and policies.
 24. Rural exodus started in Lebanon in the 1960s, with different movements during the war and completing in the last decade. It has had serious impacts on land, as abandoned agricultural lands are easily eroded. In particular many terraces in the mountainous areas of Lebanon are no longer maintained and give rise to land degradation and to a loss of cultural values. Many Lebanese villages today do not depend on classical "rural" activities for their incomes; the inhabitants have found work in the tertiary sector or depend on remittances. Most villages have fluctuating populations varying greatly from winter to summer period. The war situation, which prevailed in the country for some 15 years, has enhanced poverty, mainly in some remote rural areas, as well as causing serious degradation of many plant communities, habitats and landscapes, resulting in the loss of many species.
 25. Lebanon, like many Middle Eastern countries, faces a challenging situation in managing its rangeland and pastures. Increasing herd sizes combine with dwindling rangeland areas to push formerly sustainably managed areas into long-term spirals of decline. Overgrazing is caused by a range of factors at the root of which lie property rights, population increase and poverty. Meanwhile, the ecological impacts of overgrazing are often severe; they include erosion and other forms of land degradation. The problems of overgrazing are stronger on the Eastern side of the Mount Lebanon Chain and in the Beka'a Valley, where the system of land tenure is dominated by "amiri", but where transhumance is becoming unregulated.
 26. Forest fires including intentional ones (mainly for land reclamation) add to the problems the ecosystems are facing. The frequency and intensity of these fires are a real threat to the sustainability of the forest ecosystems. They usually occur at the end of summer (between June and late October) and are followed a few weeks later by heavy showers of rain, which cause severe soil losses. Natural forest stands are further put into risk because of limited regeneration, especially in the dry areas and of the uncontrolled spread of damaging insects and diseases.

Barriers and Alternative Strategies

27. Appendices 5 and 6 give a detailed overview of the barriers to sustainable forest land management and alternative strategies and mitigating measures. Responsibility for forests, woodland and Mediterranean maquis is based in Lebanon on a centralised approach. Local communities and even private persons are not allowed to use their wood resources, even though the trees grow on their own land. Tree-felling is prohibited throughout the country. This ban has helped a lot in conserving the existing forest resources, but at the same time, it has also led to a decreased interest in planting trees and conducting afforestation measures, or to adoption of a "prevention" ethic for forests, and thus represents a perverse incentive for sustainable forest management.

28. The barriers to sustainable forest land management include (see also the list given in 4 and 5):

Economic barriers

- Present system of state-owned forests (amiri land) provides little or no benefits for local people;
- Legal restrictions avoid the economic utilisation of private forests (no incentives to afforest or to prevent deforestation);
- Insufficient financial resources of responsible state agencies;
- Maquis often private property and regarded as “unproductive land”.

Social barriers

- Unclear land register records (mulk and waqf land);
- Land tenure system presents constraints to ensuring forest landscape connectivity (small plots of forests scattered over a large area);
- Illegal forest clearances insufficiently persecuted;
- Unregulated extensive transhumance system (grazing difficult to control).

Environmental barriers

- No consideration of environmental impacts of either government sponsored or private initiatives, which often result in unintended negative environmental consequences.
- The different sectors (e.g. forestry, agriculture, grazing, water) either compete with each other, or have contradictory aims, thus leading to uncoordinated/conflicting planning and actions

Knowledge / Technology barriers for ecosystem restoration

- No reliable statistics to allow careful planning and implementation;
- Only low number of technical forestry experts available in Lebanon (concepts of sustainable forestry and ecosystem services not taught at national universities);
- Shortage of nurseries which could provide autochthonous species for reforestation; lack of understanding of principles of ecosystem restoration;
- Private sector hardly able to deliver services in forest restoration.

Institutional / Policy barriers to both prevention of deforestation and restoration

- Insufficient capacities in government agencies (MoA, MoE, local governments and others);
- Deficiencies in cooperation among state agencies;
- Insufficient political ownership (stewardship) for forests and wood lands;
- Deficiencies in governance (including corruption);
- System of land use planning not effective (inability to cut across sectors; weak law enforcement);
- No control over development especially during civil war;
- Weak decentralised forest management structures (local forestry offices) that are normally taking care of “amiri” land;
- Weak capacities in central and local government agencies to control timber extraction;
- Legal constraints give little economic incentives for sustainable use of forests;
- Poor law enforcement (grazing in forests/woodland is prohibited by law).

29. Based on these barriers, a detailed list of alternative strategies and mitigating measures has been developed (see Appendices 5 and 6). The project will build on the NRP as an entry point, and will focus on developing and strengthening an appropriate management framework and management capacities for the sustainable management of forest land, and the development of innovative technologies and instruments for the restoration of forests and woodland ecosystems. The project will promote “innovative approaches” to Lebanon, which comprise economic incentives for woodland rehabilitation and management, participatory approaches, strengthening local stewardship through shifting responsibility for woodlands from central to communal level, and strengthening the role of the private sector as provider of services and goods. In addition, the project will seek international expertise to identify most suitable technologies in the area of propagation (at the nurseries level), soil preparation, water harvesting, and tree management which ensure survival of seedlings, promote faster tree growth and reduce establishment costs. Relying on the NRP, the project will not directly support the large-scale rehabilitation of forest and woodland, but will conduct some pilot scale demonstration of environmentally sustainable alternative techniques. However, it will primarily concentrate on supporting the development of capacities and technologies necessary for the successful leveraging of the NRP towards SLM and thus generating global benefits from enhancing ecosystem integrity and preventing further degradation of globally significant forest and woodland ecosystems.

30. Considerable time has elapsed since the first serious attempts to combat forest land degradation in Lebanon (large-scale afforestation combined with rural development was initiated in the frame of the

“Green Plan” in the 1960s and 1970s), but not much has survived in terms of organisation, infrastructure and human resources, onto which the government could build now. MoA and MoE, who share the main responsibility for forest and woodland management and for afforestation, are making efforts to build responsibility and to rebuild their capacities.

Problem Statement

31. The forests of Lebanon are a unique feature in the arid environment of the eastern Mediterranean, but they have suffered a lot from conversion to agricultural land and rangeland, housing, infrastructure and industry. The management of the woodland resources is insufficient, with little control of illegal timber extraction and charcoal production, and the restocking of trees is on an insufficient scale. Weak and scattered governmental capacities in combating forest degradation, centralised approaches with little rights and responsibilities of local communities and little public awareness for the function of the forest vegetation for soil and water conservation are important barriers which need to be addressed. The loss of the natural and semi-natural vegetation has led to decreased ecosystem services and functions, through increased soil erosion and decreased soil fertility, and imposes serious threats to ecosystem integrity, biological diversity, and the ability of the soil to function as water stores and the ability of forests to function as carbon stores. The ongoing degradation of the Lebanese forests finally leads to lower agricultural productivity and other provisioning services, such as supply of medicinal plants.

Baseline Scenario

Lessons Learnt from Completed Projects and Programmes

32. Lebanon has undergone a series of experiences of soil conservation, forest conservation and afforestation, which was heavily influenced by the years of civil war.
33. In the 1960's, the Government of Lebanon put in place a “Project for the Improvement of the Lebanese Mountains”, which focused on three major activities: land reclamation (e.g. terracing and construction of rural roads), irrigation (establishment of ponds and distribution networks), and reforestation. This so-called “Green Plan” was implemented by a separate Authority under the Ministry of Agriculture. Under this umbrella, large-scale reforestation projects were initiated during the 1960's and 1970's, including the establishment of tree nurseries. For example, reforestation was undertaken to the cedar forests in the Chouf Mountains (e.g., Massaer el Chouf, Barouk, and Ain Zhalta). Unfortunately, these activities were interrupted by the war, and were not followed-up adequately in the post-war period. Although the Green Plan does still exist as a government authority, it is no longer involved in the forestry sector.
34. Due to the lack of capacities in MoA, the Green Plan could not be revitalized after the end of the civil war in 1991. There are now very few reforestation activities throughout the country, with none of them being significant on a national level. Among the larger projects is a joint effort between Syria and Lebanon, which undertakes afforestation in the eastern (Anti-Lebanon) mountain chain close to the border with Syria. In addition to autochthonous wood species, fruit trees and trees relevant to biodiversity have been planted. Artificial water ponds were also built and hydrogel was also used to increase the moisture-retention capacity of the soil. Seedlings are brought from Syria. This seems to be a successful recent effort of afforestation, but from the perspective of cost-effectiveness, it can hardly be used as a model for the rest of the country.
35. In addition to the various efforts undertaken by the Government of Lebanon, NGOs and CBOs play an important role in the country's efforts to combat land degradation. NGOs and CBOs often work together with governmental agencies and with the support of local and international donors and sometimes even the private sector. Many afforestation campaigns were carried out throughout the country. While these efforts are significant socially and from the perspective of awareness-building, their impact on overall forest cover is almost negligible. Although there is no reliable information on the scale and impact of these campaigns, the success rate (survival rate of planted trees) is believed to oscillate between 10 and 40 percent, at best. One of the better-known examples of an afforestation project run by a NGO was launched in 1998 by the “Committee for the Friends of the Cedars”, which secured seed money from the “Iles de France” and currently manages a tree nursery, which can produce up to 25,000 saplings per year. The cedars are planted on a 226 ha area in Bcharré, which was donated by the municipality. After planting, follow-up and maintenance is secured by a tree-adoption programme, and sponsors are encouraged to secure maintenance (watering, weeding, and protection) for an 18-years period. Other activities are conducted by the NGO AFDC including organizing annual reforestation campaigns between December and February

in different Lebanese areas, producing 100,000 pine trees annually through its affiliated Tree Nursery, located in Ramlieh village in the caza of Aley, conducting reforestation awareness activities for students and providing technical assistance to various groups working on and/or interested in reforestation.

36. The MoA executed between 1997 and 2000 a project aiming at controlling forest fires. It was implemented in cooperation with the French Forest Office (ONF) and comprised provision of equipment for early intervention as well as capacity building on the levels of both engineers and forest guards. A national committee for combating forest fires has been established subsequently, and it includes representatives from all concerned ministries. Another project supported by the European Union and implemented also in cooperation with ONF between 1996 and 1999 aimed at sustainable forest management through the establishment of three pilot projects in Beka'a, Northern Lebanon and Mount Lebanon. The project provided demonstration at different levels including production of seedlings, reforestation, grazing management, forest management and capacity building and training for engineers in the MoA. AFDC and as part of "Al Harka Be Al- Alb" campaign is working on several forest fire fighting projects including a project funded by the "Lebanese Recovery Fund" that includes instalment of early warning system for fire breakouts, establishment of fire breaks, rehabilitation of infrastructure for combating fires, providing Equipment (fire trucks; safety uniform; manual kits), and 11 training workshops on forest management reforestation and forest fire fighting.
37. Lebanon has received financial assistance from GEF for the protection and management of two forest nature reserves through a project entitled "Strengthening of national capacity and grassroots in-situ conservation for sustainable biodiversity protection". The project was implemented between 1996 and 2002 by UNDP and executed by MoE. Another GEF-supported project (MSP), called "Integrated Management of Cedar Forests in Lebanon in Cooperation with other Mediterranean Countries", started in 2003 and contributes to the management of cedar forests and their protection from infestation with insect pests. The primary focus of this project is on determining the causes of appearance of *Cephalcia tannourinensis* in the Tannourine-Hadath el-Jebbeh Cedars Forest and determining means to prevent its spread to other countries in the region. The project is implemented by UNEP and executed by the MoE together with the American University of Beirut. Both of these projects, however important, only address the biodiversity aspects of forest management and do not tackle the larger landscape-wide issues.

The National Reforestation Programme (NRP)

38. Whereas national reforestation campaigns were previously the sole responsibility of the MoA, the Government of Lebanon decided recently to share it between MoA and MoE: a yearly government allocation of LBP5 billion (about US\$3.3 million) was transferred to the MoE in 2001.. This budget allocation is significant in comparison with MoE's own budget (US\$1.7 million in 2000). Recognizing the importance and complexity of reforestation, the MoE has developed a project implementation plan covering four phases: Phase I from 2002-2004, phase II from 2004-2006, phase III from 2006-2008 and phase IV from 2008-2010 with a possibility of a phase V in case budget allows-. In the short term (2002-2006), the MoE targets to restore and rehabilitate 18,000 hectares of disused lands and hopes to set in place a framework for subsequent efforts, to ultimately achieve a forest cover of 200,000 hectares (20 percent of Lebanon's surface area) over the next 30-40 years. Reforestation campaigns are implemented through a bidding process. MoE experiences great difficulties in carrying out reforestation activities on the scale required: whereas a total of 18,000 hectares were expected to be reforested by the end of 2005 (3500 hectares per year), only 666.5 hectares were subcontracted by the end of 2004 (see map given in the Appendix 3). The reforestation plots are scattered all over the country, many of them being only a few hectares large. The reasons for this slow implementation are diverse and include, according to an analysis undertaken by MoE:

- External political influence and bureaucracy;
- Lack of necessary equipment;
- Insufficient number of technical staff within MoE;
- Absence of MoE facilities in the mohafazas ("provinces");
- Site selection without previous field visits;
- Limited availability of local seedlings;
- Lack of capacities of the private sector to undertake afforestation work;
- Concentration of afforestation activities on small plots, often only a few hectares large;
- Little public understanding (no accompanying awareness building).

39. Being aware of the shortcomings of the NRP and taking into account that the NRP does not follow a clear operational plan, the MoE decided to draft an Action Plan to assist implementation of the NRP.

The main parts of the action plan were:

- Identification of key areas and potential sites for reforestation;
- Definition of quality parameters for the target planting stock;
- Identification of priority species for seed collection and forestry;
- Assessment of forest-related institutions and laws;
- Organisational proposal for a strengthened government organisation on forest management and afforestation;
- Five-year reforestation action and business plan.

40. This *National Reforestation Action Plan* originally had been designed as part of this GEF-MSP with co-funding from the EU through the MSC-IPP project. However, as the MSP experienced some delay, the MoE with support from MSC-IPP went ahead with the preparation of the plan. The MSP can now build on the information which became available during this comprehensive assessment and ensure that SLM principles and practices are properly mainstreamed into the implementation of the NRP business and action plan.

41. The Action Plan for the first time shows the prerequisites for large-scale afforestation in institutional, legal and technical terms and assesses the financial implications. It quantifies the human and institutional capacities for conducting large-scale measures and sets priority for restoration of land. It thus provides a vision for the NRP.

II. STRATEGY

42. Lebanon ratified the United Nations Convention to Combat Desertification (UNCCD) in 1996. The country is eligible for GEF funding; it is participating in the Restructured GEF since 1994. Lebanon is eligible to borrow from the World Bank and receives technical and financial assistance from the United Nations Development Programme (UNDP).
43. Lebanon has signed and ratified the UNCCD and is committed to combating land degradation and dealing with the root causes of the problem at the national and local levels. Most importantly, and to fulfil its obligations under the UNCCD, Lebanon has prepared a *National Action Programme (NAP)* to serve as an umbrella, a guiding framework for the long-term implementation of the UNCCD. The NAP, which was completed in 2003, was prepared with assistance by the German Government through GTZ, and followed a participatory, bottom-up approach involving communities of affected areas and concerned stakeholders. This builds on the decentralization efforts already initiated by the Lebanese Government. The NAP gives a country-wide assessment of desertification, and identifies geographic and thematic priority areas for intervention. Desertification is most severe in the extreme north and south of the country, as well as in the east. These are also the poorest regions of Lebanon. The NAP identified the degradation of forests and woodlands as one of the main factors for desertification. Much of the vegetation today consists of a mosaic of patches or remains of natural forests once covering the Lebanese Mountain chains and protecting them from erosion. The NAP gives high priority to the protection and restoration of forest and woodland resources.
44. Land degradation has been identified by the Government of Lebanon as a major obstacle for development also on other occasions: A strategy for agricultural development prepared in 1996 by the *Lebanese Agriculture Research Institute (LARI)* included the protection and development of forests, and emphasised their role for land conservation. A subsequent study by LARI identified the problems and threats faced by the Lebanese forests. Also Lebanon's *Millennium Development Goals Report (MDGR)* issued in 2003 regards unsustainable practices in agriculture as one of the major challenges, as they have already lead to deterioration in environmental conditions, particularly in poor regions of the country.
45. With the collaboration of the UNDP and GEF, the MoE developed in 1998 a *National Biodiversity Strategy and Action Plan (NBSAP)*, which puts the protection and restoration of terrestrial ecosystems at first place, as they have suffered severely from degradation.
46. The conservation of the forest land cover is a high national priority. In 1995, only a few years after the end of the civil war, the Government of Lebanon announced on the occasion of the *World Day to Combat Desertification* an ambitious five-year programme of reforestation. The Forest Code (Law 85 of 12/9/1991) was amended by the Parliament in 1996 (Law 558 of 24/7/96), and stipulates that all cedar, fir, cypress, juniper forests and "other forests" in Lebanon are protected *de facto*. Today, there are about 40 sites in Lebanon with various degrees of protection, and most of them are forest areas. Out of these, 7 are nature reserves authorized by law: The Palm Islands, Horsh Ehden, Al-Chouf Cedars, Tyre coast, Bentaël, Tannourine Cedars Forest and Yammouni and more than 15 are protected by decree under the amended Forest Code; in addition to Karm Shbat, which is proclaimed by a ministerial decree. Recently, MoE declared by ministerial decree three natural sites: Kammouha, Dalhoun Forest and Wadi al Karakir.
47. The project builds on the National Reforestation Program (NRP), a significant long-term commitment by the Government of Lebanon in support of the enforcement of the Forest Code (Law 85 of 12/9/1991); the project will complement the baseline by addressing gaps related to capacity development, inter-agency coordination, conceptual development, mainstreaming of SLM, and development of sustainable financial mechanisms for implementation of SLM practices.
48. The project's strong national ownership is demonstrated by the provision of co-financing fully taken in charge by the government.
49. The project directly addresses issues of inappropriate land uses, specifically deforestation and forest degradation. As per the guidance of the SFM¹ program framework, the project adopts a multi-sectoral, landscape approach, combining the involvement of the private sector, the regulatory bodies and local communities in a mix of conservation/rehabilitation activities generating both

¹ Sustainable Forest Management program under GEF 4

environmental and socio-economic benefits. This project is in line with the SFM SO 2 – sustainable management and use of forest resources – contributing to programs 6.1 and 6.4; it is also in line with the LD SO 1/SO2 – SP 3 as shown by the relevance of outcomes and impact indicators.

50. In accordance with LD-2², the project will build on ongoing activities, the *National Reforestation Programme* (NRP), and will upscale successful practices and promote innovative solutions for reforestation. At the same time, the project will focus on building national capacities to provide the technical skills for introducing innovative approaches and to get them established and integrated into the NRP on a permanent basis. The project thus aims at triggering large-scale reforestation measures. It will provide training to state officers to enhance their technical and managerial skills, strengthen the private sector as service providers in the field of reforestation, enhance understanding of ecosystem restoration principles (including restoration of services and functions), and will help set up the institutional and organisational frameworks necessary for the future work. In parallel to these actions, the project will support reforestation activities on a pilot scale to develop and test innovative methods and processes for ecosystem restoration. The development and application of participatory approaches, which are still not widely used in Lebanon, are at the core of these efforts. Public involvement is one of the principles of GEF-funded projects to enhance the recipient country's ownership, to address the social and economic needs of affected people, and to make use of skills, experiences, and knowledge, in particular, of non-governmental organisations (NGOs), community and local groups, and the private sector. Although there is a strong commitment of the Government of Lebanon to apply participatory approaches to combat land degradation (see e.g. NAP), experiences are still limited, and skills and methods still have to be further developed and adapted to local needs and traditions.
51. A long-term goal of this project is to reduce soil erosion by improving the vegetation cover, and thus to contribute to enhanced ecosystem integrity (health, stability and connectivity). Some of these ecosystems are linked to river basins, some of which classify as international waters: El Kebir River, which is a coastal river that traces the northern border of Lebanon with Syria; the Hasbani River, which crosses the southern border and forms one of the tributaries of the River Jordan; and El Assi (Orontes) River that flows northwards into Syria and further into Turkey, draining the northern Beka'a plain. As an indirect benefit, the project thus contributes to the GEF focal area of "international waters".
52. The global benefits to be captured by this project are thus synergistic, as it will not only combat land degradation, but will also help restore/rehabilitate the biologically diverse composition of forest and woodland ecosystems, and will produce water quality and quantity benefits to various watersheds, including transboundary ones. Lebanon had not been in a position to give priority to these issues during the long years of civil war, but has now made in the frame of NRP development strong commitments towards this end; in light of the enormous efforts still required for reconstruction of infrastructure and rebuilding the state after the civil war 1975-1991 and the armed conflict in 2006, it would be difficult for the country to achieve global benefits without donor support.
53. In response to NBSAP and NAP recommendations to increase the % forest cover in Lebanon from 7% to 20 %, the Ministry of Environment has been tasked by parliament and government to design and implement a National Reforestation Program. The funding and plan of action of this program has been approved through a framework law, with an overall amount of US\$ 18M allocated over 5 years. The core of this program consists of rehabilitation and plantation of forest groves in different parts of Lebanon. The selection of sites and species have been undertaken through a national consultation taking into account (i) risks threatening the sustainability of the groves; (ii) proximity to natural forest stands; (iii) accessibility to the sites and adhesion of local authorities (municipalities) to the proposed reforestation action.
54. The GEF project builds on the *National Reforestation Programme* (NRP), a significant long-term commitment by the Government of Lebanon, and will complement this baseline by addressing gaps related to capacity development, inter-agency coordination, conceptual development, integration of SLM in land use planning, and development of sustainable financial mechanisms for implementation of SLM practices. The project will promote the development of participatory approaches, and activities to create public awareness of and stronger responsibility towards the function of forest vegetation cover for soil and water conservation.

² GEF 4 focal area strategy for Land Degradation

55. The long-term goal of this GEF funding request is to complement the on-the ground investments undertaken through the National Reforestation Program through the creation of an enabling environment and by building capacity for sustainable land management as a contribution to greater ecosystem stability, enhanced food security and improved rural livelihoods. While the National Reforestation Program is focused on investment and on the ground rehabilitation of forests, the GEF increment will ensure that considerations such as ecosystem integrity, species selection, ecosystemic cohesion and integration in the broader landscape are uptaken into the thinking and implementation of the NRP. In addition to that, the GEF components on community participation, legal and policy frameworks as well as innovative financing mechanisms will ensure the long term sustainability of the NRP.
56. The rationale is to remove the institutional, economic, technical barriers to SLM in this sector in order to enable NRP to meet its targets and up-scale forestry SLM models and approaches over 20 years at the national scale. The immediate objective is to develop a strategy for safeguarding and restoring Lebanon's woodland resources and assist its implementation through capacity building and execution of appropriate SLM policies and practices. To this end, the project has three outcomes:
- Outcome 1: An appropriate management framework and management capacities for safeguarding and restoration of degraded forest areas is in place.
 - Outcome 2: A set of innovative technologies and instruments for the restoration of forests and woodlands, and their subsequent sustainable management, which has been designed and validated in pilot areas.
 - Outcome 3: Monitoring, learning, adaptive feedback and management.
57. Financial resources to actually carry out the rehabilitation-reforestation activities in pilot areas are included in the below table.

Project outcomes	GEF	Co-financing Government	Total
1. An appropriate management framework and management capacities for the safeguarding and restoration of degraded forest areas.	315,000	315,000	630,000
2. A set of innovative technologies and instruments for the restoration of forests and woodlands, and their subsequent sustainable management, has been designed and validated in pilot areas.	425,000	678,000	1,103,000
4. Monitoring, learning, adaptive feedback and management.	150,000	95,000	245,000
Project Management	90,000	187,000	277,000
TOTAL	US\$980,000*	US\$1,275,000	US\$2,255,000

*Does not include the 98,000 USD Agency Fee

58. The global environment objectives of the project would include the generation of multiple and interconnected global environmental benefits by assisting the Government of Lebanon to make its efforts towards combating land degradation more sustainable, to assure that biodiversity values are conserved, and to contribute to the stabilization of climate and regional surface and ground water systems. The project will help stabilize and enhance ecosystem structures and services through restoring degraded ecosystems in the wider landscape, increasing carbon stocks, increasing diversity of biological resources in restored ecosystems and habitats, and reducing stress on transboundary water bodies from sedimentation and pollution from land management.
59. The global benefits to be captured and delivered by this project are synergistic, as it will not only combat land degradation, but will also help to restore/rehabilitate the biologically diverse composition of forest and woodland ecosystems, and will produce quality and quantity benefits to various watersheds, including trans-boundary ones.

III. RESULTS AND RESOURCES FRAMEWORK

<p align="center">Project Title: Safeguarding and Restoring Lebanon's Woodland Resources</p>							
<p align="center">Project Goal: An enabling environment and capacity for sustainable land management as a contribution to greater ecosystem stability, reduced soil erosion, enhanced food security and improved rural livelihoods</p>							
Project Strategy	Indicator	<i>Baseline</i>	<i>Target</i>	Sources of Verification	Risks and Assumptions		
<p>Objective of the project: A strategy for safeguarding and restoring Lebanon's woodland resources developed and under implementation through capacity building and execution of appropriate SLM policies and practices.</p>	Successful pilot projects which can serve as models for large-scale land rehabilitation	Only scattered experiences	At least 3 comprehensive pilot projects by end of project	Project reports, evaluations	<ul style="list-style-type: none"> - Political stability - Ability of the government to overcome inter-agency competition - Government continues to allocate significant funds for land rehabilitation (afforestation) 		
	Acceptance of the institutional setting necessary for sustainable forestry and efficient large-scale afforestation	None	Business plan accepted by year 2 of the project	MoE work plan	<ul style="list-style-type: none"> - Timely delivery of co-financing and baseline financing - Timely delivery of NRP financing 		
	Strategy adopted by the government	None	Budget allocated by end of project	State budget			
	Degraded land in pilot sites restored by the project according SLM principles	None	300-400 ha	Reports			

<p>Outcome 1: An appropriate management framework and management capacities for the safeguarding and restoration of degraded forest areas.</p>	<p>– Forest management and rehabilitation authority</p> <p>– Number of full-time forest engineers knowledgeable of and working for the restoration of degraded forestlands</p> <p>– Amended forest law</p>	<p>Responsibilities spread over various government organisations less than 5</p> <p>Present law</p>	<p>– Only one strong coordinating organisation existing by end of project</p> <p>– Over 10 by end of project</p> <p>– Amended text by end of project</p>	<p>Institutional structure</p> <p>Organigram</p> <p>Report</p>	<p>Political will</p> <p>Financial resources</p> <p>Political will</p> <p>Financial resources</p> <p>Political will</p>
<p>Output 1.1: Amendments to legal instruments are elaborated.</p>	<p>– Draft bills and draft regulations</p>	<p>Forest law from 1949 plus various amendments</p>	<p>Proposal for new forest and regulations law by month 15</p>	<p>Specific technical report</p>	<p>Cooperation between ministries; Adoption of law beyond responsibility of project.</p>
<p>Output 1.2: Design of the institutional structure of a government organisation which reflects the cross-sectoral nature of land degradation, refined and agreed upon.</p>	<p>– Plan of organisational structure (on central and decentralised levels) with detailed description of responsibilities, tasks, functions, justification, costs, etc.</p>	<p>No comparative analysis</p>	<p>Proposal for organisational reform developed by end of first year</p>	<p>Specific technical reports</p>	<p>Government agencies are willing to share responsibility</p>
<p>Output 1.3: Human capacities for the design, implementation and monitoring of forest restoration measures strengthened.</p>	<p>– Training in participatory land use planning and in afforestation techniques</p>	<p>None</p>	<p>– At least 20 MoA and MoE staff trained by end of project</p> <p>– At least 50</p>	<p>Representative survey, training reports, evaluation reports</p>	<p>MoA and Moe will continue training after project termination</p>

				local people are trained in participatory techniques			
Output 1.4: Cross-sectoral integrated land use planning in the field of land degradation in woodland areas strengthened (mainstreaming).	<ul style="list-style-type: none"> – Inter-ministerial Project Oversight Committee – Financial or in-kind contributions made by other agencies for implementation of pilot measures on a yearly basis 	None	None	<ul style="list-style-type: none"> – Committee meets at least once in first 6 months – Equivalent to at least 30% of the yearly budget of NRP 	Progress reports, technical reports, evaluation reports	Other agencies and ministries not cooperative	
Output 1.5: Funding strategy for NRP developed and in place.	<ul style="list-style-type: none"> – Funding strategy developed and adopted by the Government, capacities to implement strategy available 	None	None	Strategy adopted by end of second year	Report, government decision	Implementation of strategy political decision beyond the direct impact of the project	
Outcome 2: A set of innovative technologies and instruments for the rehabilitation of forests and woodlands, and their subsequent sustainable management, has been designed and validated in pilot areas.	<ul style="list-style-type: none"> – Innovative technologies – Participatory approach 	None	None	At least 3 demonstrated by end of project	Reports	Pilot areas reveal as unsuitable for technical, political or socio-economic reasons	
Output 2.1: Economic incentives to conduct woodland rehabilitation and management created for local communities and for	<ul style="list-style-type: none"> – Regulation guaranteeing their right to use wood and non-wood forest products 	None	Not applied	Applied in all afforestation measures by end of project	Reports	Little interest in forestry issues	Economic incentives not strong enough

private persons.			project		
<p>Output 2.2: Afforestation and ecosystem restoration measures on public land implemented through participatory approaches.</p>	<ul style="list-style-type: none"> - Participators stakeholder planning workshop - Voluntary contributions of local stakeholders to afforestation measures 	<p>No workshops</p> <p>No contributions</p>	<p>At least 2 participatory planning workshops a year in each pilot site</p> <p>In-kind contributions from local communities amounting to 5% of estimated cost of measures</p>	<p>Workshop report</p>	<p>No interest of local communities in these workshops</p> <p>Local communities not ready or able to make contributions</p>
<p>Output 2.3: Responsibilities and duties for forests delegated to communal level, thus strengthening local stewardship.</p>	<ul style="list-style-type: none"> - Budget allocations for communities (municipalities) for afforestation 	<p>No budgets within local administration</p>	<p>Budget allocation in 4 pilot sites by second year</p>	<p>Financial report</p>	<p>No budget allocations because of financial constraints</p>
<p>Output 2.4: Role of the private sector as provider of services and goods strengthened.</p>	<ul style="list-style-type: none"> - Number of private firms offering services and goods related to sustainable forest management and forest restoration; number and quality of saplings offered per year 	<p>To be determined</p>	<p>Offer exceeds the demand by end of project</p>	<p>Assessment report</p>	<p>Market monopolised by a single firm; no competition among companies</p>
<p>Output 2.5: Local community based monitoring of the enforcement of the</p>	<p>number of persecuted cases of violation</p>	<p>To be determined</p>	<p>Increase by 100 percent by end of</p>	<p>Monitoring report</p>	<p>Communities do not persecute violations done by members of</p>

regulation on the protection of forests			project		the own community
Output 2.6: Good practice for SLM in woodland areas integrated in NRP	Examples for good practice in SLM	None documented	At least 10 cases documented by end of project	Monitoring report	No good practice
Outcome 3: Monitoring, learning, adaptive feedback and management.	<ul style="list-style-type: none"> – Public awareness for forest SLM – Replication of innovative practices developed and tested by the project into the NRP 	<p>No. of news in the media</p> <p>None</p>	<p>No. of news in media increased by 100% by end of project</p> <p>At least 3 cases of replication shown by end of project</p>	<p>evaluation of media Reports</p>	<p>Political framework conditions do not allow the development of broad public awareness for environmental issues</p> <p>Budget of NRP to allowed to be used for innovative measures</p>
Output 3.1: Project understood by the government as national cross-sectoral effort.	– Inter-ministerial Project Oversight Committee	None.	Committee in place	Minutes	Project Oversight Committee does not play an active role
Output 3.2: Assessment of the baseline situation of LD	– Assessment report	None	Baseline for LD indicators available at end of first year	Report	Availability of the results of the 1st Forest Resources Assessment

<p>Output 3.3: The project's performance is monitored and evaluated.</p>	<ul style="list-style-type: none"> - PMU in place - M&E system established 	None	<ul style="list-style-type: none"> - Office operative by month 6 - average 60% yearly delivery rate - according to M&E plan 	Reports	None
<p>Output 3.4: Project results and lessons learnt disseminated for replication.</p>	<ul style="list-style-type: none"> - Regional symposium conducted - Report on lessons learnt - Participation of experts and decision-makers in international events 	None None	<ul style="list-style-type: none"> - 2 symposia by the end month 6 and month 30 - one report - participation of at least 10 experts throughout life of project 	Proceedings Report Mission reports	Partnership for the conduction of symposia could not be established - Individuals not available for these events
<p>Output 3.5: Awareness of decision-makers and the concerned communities for the importance of forest ecosystems for sustainable livelihood increased.</p>	<ul style="list-style-type: none"> National annual demand for saplings and seedling Justification for afforestation measures (afforestation purpose, location, tree species) 	To be defined To be defined	Increased demand by 20% by end of project Awareness that afforestation measures are conducted for the purpose of SLM increased by 50%	Assessment report Questionnaire report	Framework conditions promote other priorities Because of Lebanon's overall economic development, the public interest is focused on measures which give short-term returns

IV. ANNUAL WORK PLAN

ward ID:	00050136
ward Title:	PIMS 3371 SLM MSP: Safeguarding and Restoring Lebanon's Woodland Resources
Business Unit:	LBN10
Project Title:	PIMS 3371 SLM MSP: Safeguarding and Restoring Lebanon's Woodland Resources
Project ID: PIMS	3371

ATLAS Project Objective	Atlas Activity (GEF Outcome)	Responsible Party	Source of Funds	Fund ID	ATLAS budget	ATLAS budget description	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Total Amount (USD)
Activity 1 A strategy for safeguarding and restoring Lebanon's woodland resources developed and under implementation through capacity building and execution of appropriate SLM policies and practices.	Activity 1	LARI	62000	10003	71200	International Consultants	32,000	32,000	17,106	4,000	0	106,25
		LARI	62000	10003	71300	Local Consultants	25,500	34,500	19,000	8,625	7,500	95,12
		LARI	62000	10003	71400	Contractual Services- Ind.	9,124	9,124	9,124	9,124	9,124	45,62
		LARI	62000	10003	71600	Travel	12,000	12,000	11,000	0	0	35,00
		LARI	62000	10003	71500	UN Volunteers	3,000	3,000	3,000	3,000	3,000	15,00
		LARI	62000	10003	72500	Supplies	400	400	400	400	400	2,00
		LARI	62000	10003	74500	Miscellaneous Expenses	3,000	3,000	3,000	25,149	3,000	16,00
		LARI	62000	10003		sub-total	85,024	94,024	62,630	50,298	23,024	315,00
		LARI	62000	10003	71200	International Consultants	40,000	40,000	30,000	5,000	0	118,00
		LARI	62000	10003	71300	Local Consultants	20,000	10,000	20,000	4,500	4,500	60,50
Activity 3	Activity 3	LARI	62000	10003	71400	Contractual Services- Ind.	7,739	7,739	7,739	7,739	7,739	38,69
		LARI	62000	10003	71500	UN Volunteers	3,000	3,000	3,000	3,000	3,000	15,00
		LARI	62000	10003	71600	Travel	25,000	25,000	23,305	6,000	6,000	79,80
		LARI	62000	10003	74200	Audio vis & print. production	2,500	3,500	4,000	0	0	10,00
		LARI	62000	10003	72500	Supplies	1,400	1,400	1,400	1,400	1,400	7,00
		LARI	62000	10003	74500	Miscellaneous Expenses	4,000	4,000	4,000	4,000	4,000	21,00
		LARI	62000	10003	72300	Materials & Goods	25,000	25,000	25,000	0	0	75,00
		LARI	62000	10003		sub-total	128,639	119,639	118,444	31,639	26,639	425,00
		LARI	62000	10003	71200	International Consultants	0	0	15,000	0	0	19,500
		LARI	62000	10003			0	0	0	0	0	34,50

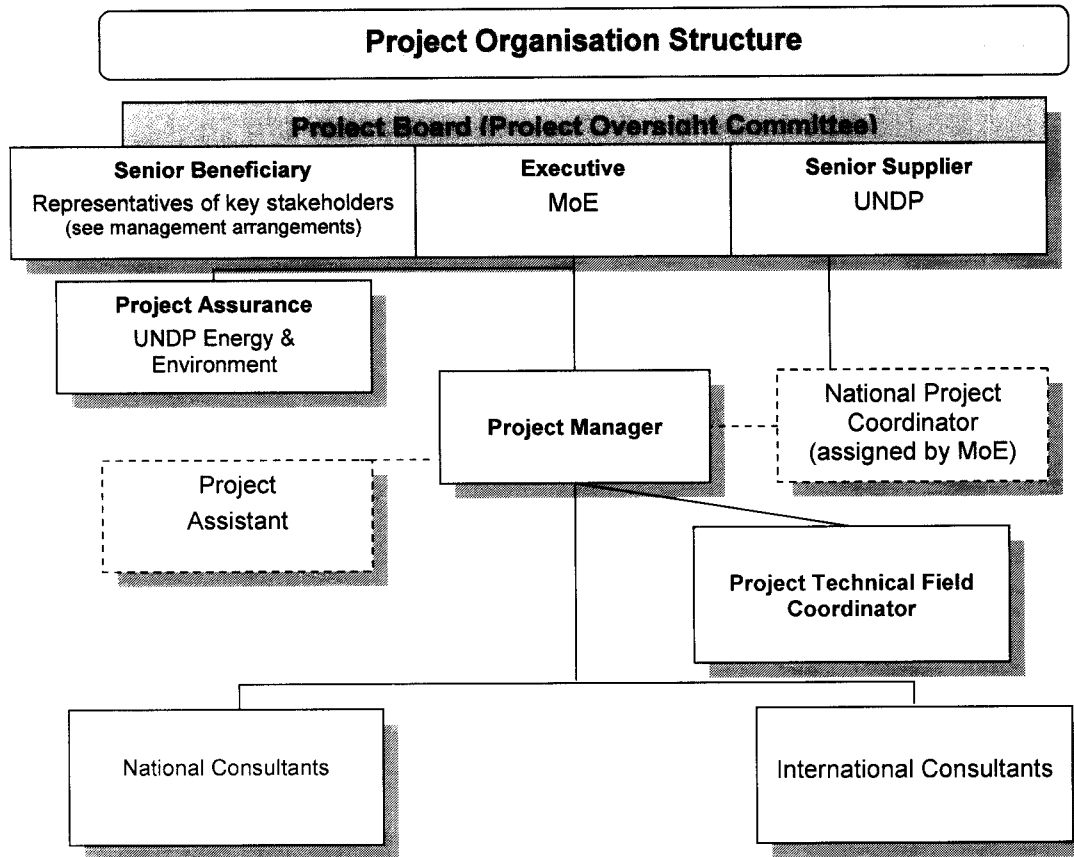
LARI	62000	10003	71300	Local Consultants	16,000	7,500	10,000	4,000	9,000	46,50
LARI	62000	10003	71400	Contractual Services- Ind.	2,450	2,450	2,450	2,450	2,450	12,25
LARI	62000	10003	71600	Travel	2,820	2,500	9,430	2,500	10,000	27,25
LARI	62000	10003	72800	Information & Technol. eqpt.	3,000	0	0	0	0	3,00
LARI	62000	10003	74200	Audio vis.&print. production	0	3,750	3,750	4,750	4,750	17,00
LARI	62000	10003	72400	Comm. & Audio-Visual Eqpt.	1,400	1,400	1,400	1,400	1,400	7,00
LARI	62000	10003	74100	Professional Services	500	500	500	500	500	2,50
				sub-total	26,170	18,100	42,530	15,600	47,600	150,00
LARI	62000	10003	71400	Contractual Services- Ind.	11,088	11,088	11,088	11,088	11,088	55,44
LARI	62000	10003	71500	UN Volunteers	6,000	6,000	6,000	6,000	6,000	30,00
LARI	62000	10003	74500	Miscellaneous Expenses	1,060	1,000	1,000	1,000	500	4,56
Activity 4										

V. MANAGEMENT ARRANGEMENTS

60. The project will be implemented over a period of five years. National Execution (NEX) is the management arrangement foreseen by UNDP. NEX has been chosen as there is adequate capacity in the Government of Lebanon to undertake the functions and activities of the project. The UNDP Country Office has ascertained the national capacities during the formulation stage of this project.
61. Government: The Ministry of Environment (MoE) will be the executing agency responsible for project coordination at the national level. The MoE is the primary authority responsible for afforestation, management of communal lands, protected areas, and international environmental conventions. The Ministry of Agriculture (MoA) including the UNCCD Focal Point, will play an important role as member of the Project Oversight Committee (POC).
62. Ministry of Environment and Project Oversight Committee: MoE is accountable to UNDP for the government's participation in the project, and will facilitate project implementation and ensure that internal monitoring and review systems are in place. MoE will ensure the timely release of and reporting on co-financing committed to the project, and will ensure the integration of this project's outcomes into the NRP. MoE will establish a Project Oversight Committee (POC) and will organise regular meetings. With input from POC members, MoE will provide overall guidance and support to implementation of all project activities. POC will be composed of representatives from various governmental organisations (MoA, other ministries), the UNCCD Focal Point, research institutions (LARI and academia), and non-governmental organisations. It will also include representatives from municipalities. The Minister of Environment will chair the POC. Any major changes in the project work plans will require approval from the POC in order to take effect³. POC members will also facilitate the implementation of project activities in their respective organisations, ensure that cooperative activities are implemented in a timely manner, and facilitate the integration of project-inspired activities into existing programs and practices. MoE staff or appropriate experts will be utilized when needed in accordance with UNDP guidelines, and will facilitate interaction among relevant public organisations, research institutions and private organisations. To achieve project objectives and produce required outputs, MoE will establish partnerships with other organisations including NGOs. Finally, the MoE houses the function of GEF OFP, and as such, will ensure coordination among relevant GEF funded projects and activities.
63. Project Management Unit (PMU): MoE will establish a PMU for the day-to-day management of project implementation, and for assisting MoE and other concerned stakeholders to run the project. The PMU, headed by a project manager, will be responsible for coordinating all the various inputs to the project. The project manager and an assistant will be based in the MoE offices at Beirut; as such they will be working closely with the MoE team responsible for the implementation, supervision and monitoring of the NRP. He/she will be in charge of overseeing day-to-day project implementation and management of project activities, consultant input, and confirming the quality of the project's outputs. One of the most important responsibilities of the project manager will be working effectively with members of the POC to ensure that project-inspired activities proceed on schedule within each governmental partner and non-governmental organisation.
64. Local Steering Committees: For each of the pilot areas, the project will establish a local steering committee. It will consist of representatives of the local government (mayor, agriculture, and forestry administration), land owners and other interested people. The Local Steering Committees' role will be to give a voice to the grassroots level, and will decide on the kind and extent of interventions on site-level. The Local Steering Committees will work in close cooperation with the PMU. POC may invite Local Steering Committees to report on progress in project implementation and on difficulties faced during implementation.
65. UNDP using the IA fees will be working closely with the MoE; the UNDP Country Office will be responsible for overseeing project budgets and expenditures, recruiting and contracting project personnel and consultant services, procuring equipment, and project evaluation and reporting, result-based project monitoring, and organizing independent audits to ensure the proper use of UNDP/GEF funds. Financial transactions, auditing and reporting will be carried out in compliance with national regulations and UNDP procedures for national execution. The UNDP- Country Office will designate from among its staff a project officer who will dedicate approximately 15% of his/her time to the day-to-day management, coordination, and monitoring functions for which UNDP is

³ Changes to project workplans are in line with adaptive and results-based management; they will be reported to the GEF in the annual PIR, including changes in project timeframes. Such changes will be cleared by the UNDP/GEF RCU or GEFSEC depending on the extent and level of changes recommended.

responsible.



VI. MONITORING FRAMEWORK AND EVALUATION

66. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be coordinated by the *Project Management Unit* (PMU). Monitoring and evaluating implementation progress will be based on the indicators provided in the Logical Framework. A Project Inception Workshop will be conducted with the full project team, private sector stakeholders, relevant government representatives, co-financing partners, the UNDP-CO and representation from the UNDP-GEF Regional Coordinating Unit. A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goals and objectives, as well as to finalize preparation of the project's first annual work plan on the basis of the project's logframe matrix which will be reviewed during the workshop. The roles and responsibilities of the Project Board will be defined, including that of the project manager and quality assurance role, who is independent from the Project Manager. Annual Monitoring will occur through an Annual Project Board meeting (Tripartite Review (TPR)). This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will complete the Project Implementation Review Report (PIR) which will be reviewed and discussed by the Project Board. The Project Board considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation or formulation. In addition, the project team will be responsible for the preparation and submission of the quarterly Progress Reports, technical reports, terminal report, thematic reports, etc. which will serve as monitoring tools for the Project Board.
67. In accordance with UNDP-GEF M&E procedures, an independent Mid-term Evaluation (MTE) will be undertaken after 2 years to review progress and effectiveness of implementation. Findings of this review will be incorporated as recommendations and will be instrumental for bringing improvement in the overall project design for the remaining period of the project's term. In addition, within six months of completion of project activities an independent final evaluation will be conducted to assess project achievements and impacts and to document lessons learned.
68. Additionally to reporting and internal & external evaluations and audits, the project will document all major steps in a video film. This film will later also be used for educational purposes.
69. A clear budget of US\$165,275 has been allocated for external M&E purposes. In addition, considerable efforts will be spent for internal monitoring and evaluation, based on project coordinator/MoE assessments and annual TPR meetings. It is therefore impossible to give the exact overall budget for M&E, but it is in the order of five percent of the total project budget.
70. Below is a summary description of monitoring activities, responsible parties, budgets and time frames. Only activities to be funded by GEF sources are listed here.

Type of M&E activity	Responsibility	Budget US\$	Time Frame
Inception report	Project Manager with Project Management Unit (PMU)	Paid from the operational budget*.	Two months after the start of project implementation.
Characterisation of the natural assets in the pilot areas (baseline survey)	Team of national experts	US\$5,000	During the first months of project implementation
Progress reports	Project Manager	Paid from the operational budget.	Every two months.
Visits to pilot sites	UNDP and government representatives	Paid from the IA fee and the operational budget.	Every year.
PIR/IA annual reports	UNDP country office with support from PMU	Paid from the IA fee and the operational budget.	Every year.

Type of M&E activity	Responsibility	Budget US\$	Time Frame
TPR and TPR report	Government Counterparts, UNDP country office, Project Manager, UNDP-GEF Regional Coordinating Unit	None	Every year, upon receipt of APR
Forest/afforestation monitoring system	Organisational development and PMU	US\$20,680	At the beginning, midterm and end of the project
Assessment of baseline situation of LD in Lebanon	Land use planner and PMU	US\$11,950	Beginning of the project
Evaluation of Nat. Resources Management	Project evaluator for Nat. Resource Management and PMU	US\$27,820	Annual
Mid-term evaluation and final evaluation	Independent evaluation team (international consultants)	US\$46,550	At the mid-point and end of project implementation.
Terminal report	UNDP country office, UNDP task manager, project team (PMU)	Paid from the IA fee and the operational budget.	At least one month before the end of the project
Baseline survey and monitoring of socio-economic parameters at pilot sites	Team of national experts	US\$15,000	Annual surveys.
Participatory project monitoring at pilot sites	Local communities with project team	Paid from the operational budget.	Annual surveys.
Production of a video film on progress made at pilot sites	PMU with EA	US\$15,000	At least two times a year during vegetation period plus finishing
Lessons learnt	UNDP, Project Team, Executing Agency	US\$8,000 for production of reports and participation in GEF-organised activities.	To be determined
TOTAL COST		US\$ 150,000 (without input from IA fee and operational budget)	

* PM'S SALARY AND PMU'S OPERATIONAL COSTS

Quality Management for Project Activity Results

71. Below is a preliminary Quality Management table for the project. This table shall be further refined during the initiation phase of the project.

OUTPUT 1: An appropriate management framework and management capacities for the safeguarding and restoration of degraded forest areas.		
Activity Result	<i>Amendments to legal instruments elaborated</i>	Start Date: June 08

1.1		End Date: Aug 09
Purpose	Legal work will include the elaboration of a draft bill replacing or amending the forest law issued in 1949 and its subsequent amendments. The legal assessment done in the frame of the NRP-Action Plan showed that there are overlapping mandates for forest development and management between different public institutions, which have to be eliminated. Also the legislation concerning the integration of forestry into the social and economic development has to be revised.	
Description	<ul style="list-style-type: none"> - Revise current regulations and legal instruments pertaining to access to the forest resources for traditional or historical users, management principles for the different types of forests, instruments and mechanisms for participation of stakeholders, and incentives regimes and financial measures to support reforestation and sustainable forest management. - Elaborate amendments to existing forest-related legislation (draft bills, regulations etc.); 	
Quality Criteria	Quality Method	Date of Assessment
Draft bills and regulations produced	Progress reports	End of year 2
Activity Result 1.2	<i>Design of the institutional structure of a government organisation which reflects the cross-sectoral nature of land degradation, refined and agreed upon</i>	Start Date: June 08 End Date: Aug 09
Purpose	In order to achieve a meaningful scale and secure institutional framework for reforestation, the outlines of the required national planning and supervision structure need to be specified. Options considered by the NRP-Action Plan include a new agency e.g. under the tutelage of CDR, with a robust government structure assuring its effective functioning. The mandate and the proposed organisational structure of such an agency have to be backed up by amendments of the current forest legislation.	
Description	<ul style="list-style-type: none"> - Refine the first recommendations made in the NRP-Action Plan with detailed description of responsibilities, tasks, functions, justification, costs, etc. - Promote the concept. 	
Quality Criteria	Quality Method	Date of Assessment
Plan of organisational structure (on central and decentralised levels) with detailed description of responsibilities, tasks, functions, justification, costs, etc.	Progress reports	End of year 2
Activity Result 1.3	<i>Human capacities for the design, implementation and monitoring of forest restoration measures strengthened</i>	Start Date: Sept 08 End Date: Feb 2013
Purpose	Strengthened human and technical capacities is a key project deliverable. Following the preliminary capacity assessment carried out under the NRP-Action Plan, combating land degradation is in Lebanon often regarded as a pure technical issue without taking the human dimension and its cross-sectoral nature into account. NGOs, who already play an important role in awareness-building for afforestation and conduct many small-scale projects across the country, will benefit from capacity-building as well.	
Description	<ul style="list-style-type: none"> - Enhance the implementation capacities on local (municipality) level - Increase the management capacities on national level, including the political decision-maker level - Strengthen the capacities of the private sector regarding their ability for delivering large-scale supplies. - Conduct trainings in participatory land use planning and in afforestation techniques 	
Quality Criteria	Quality Method	Date of Assessment
Trainings in participatory land use planning and in afforestation techniques	Training reports, evaluation reports	End of year 1,2,3,4 and 5
Activity Result 1.4	<i>Cross-sectoral integrated land use planning in the field of land degradation in woodland areas strengthened (mainstreaming)</i>	Start Date: Sept 08 End Date: March 2013

Purpose	The project will assist decision-makers and managers of afforestation projects to get better informed about methodological approaches applied in other countries for ecosystem restoration and the role of ministries and agencies in land use planning in the field of land degradation. There is also a need to demonstrate the role and value of public participation in afforestation projects, to understand how important this is for the sustainability of such projects.	
Description	<ul style="list-style-type: none"> - Organize meetings and workshops for decision makers - Establish an Inter-ministerial Project Oversight Committee - Organize study tours for decision-makers and experts to other sustainable forest management projects in the region to exchange knowledge and experiences. 	
Quality Criteria	Quality Method	Date of Assessment
<ul style="list-style-type: none"> - Inter-ministerial Project Oversight Committee established - Financial or in-kind contributions made by other agencies for implementation of pilot measures on a yearly basis 	Progress reports, technical reports, evaluation reports	End of year 1,2,3,4 and 5
Activity Result 1.5	<i>Funding strategy for NRP developed and in place</i>	Start Date: January 09 End Date: June 2010
Purpose	The project will complement the Financial Strategy for UNCCD/NAP Implementation which Lebanon was prepared with the assistance of UNDP Lebanon and The Global Mechanism. The strategy aims at identifying resources for SLM which includes combating land management by first assessing the national context with regard to legal, institutional, policy, fiscal and other instruments that affect the implementation of the NAP. It then lays down a guiding framework for locating and developing a mix of financial resources, including innovative approaches to resource mobilization, to fund SLM related programmes and projects through identifying viable entry points to such NAP interventions.	
Description	<ul style="list-style-type: none"> - Identify potential co-financing and entry points into already existing financial opportunities (including innovative financing) - Examine funding opportunities provided by PES and Carbon trade for SLM - Strengthen policy dialogue and institutions through providing support for establishing a coordination mechanism and a strengthened forestry and reforestation management body; - Promote SLM/Desertification issues amongst policy makers and stimulate a political momentum towards the development of a Country Financing Partnership. 	
Quality Criteria	Quality Method	Date of Assessment
<ul style="list-style-type: none"> - Funding strategy developed and adopted by the Government, - Capacities to implement strategy available 	Progress Reports, government decisions	End of year 3
OUTPUT 2: A set of innovative technologies and instruments for the rehabilitation of forests and woodlands, and their subsequent sustainable management, has been designed and validated in pilot areas.		
Activity Result 2.1	<i>Economic incentives to conduct woodland rehabilitation and management created for local communities and for private persons</i>	Start Date: December 08 End Date: December 2012
Purpose	As the possibilities to generate income through the marketing of forest products and environmental services are not used to full extent in Lebanon, the only way of getting out from this situation is to delegate both responsibility and the right to benefit from these forest resources to local communities. The project will strengthen the capacities for establishing market-oriented procedures. Also, many goods such as seedlings and saplings of autochthonous species could be provided by private firms, but they are at present practically not offered by them due to a lack of demand. The project will encourage firms to undertake investments in these fields, and will support such efforts.	

Description	<ul style="list-style-type: none"> - Initiate a process of negotiation with local communities with the aim of co-management of forest resources. Such ownership by local communities can also result in a more diverse "afforestation product" - Demonstrate at a few pilot sites how public participation can be initiated. - Strengthen the capacities for establishing market-oriented procedures <p>Incentives for private land owners to be investigated by the project may include:</p> <ul style="list-style-type: none"> - Facilitating the access to funds from the international carbon trade, supporting afforestation measures; - Financial return from the sale of wood, harvested according to a forest management plan (currently, timber extraction is illegal even on private land); - Afforestation with fruit trees, stone pines and other economically important species; - Financial benefits from multiple-uses of forests (e.g. agroforestry, recreation, medicines); - Utilization of non-wood forest products. Some of these products are available in newly reforested areas, and may generate additional incentives for local people. - Water harvesting and secure water provisioning for rural communities. 	
Quality Criteria	Quality Method	Date of Assessment
- Regulation guaranteeing their right to use wood and non-wood forest products	Progress reports, issued regulations	End of year 2,3 and 4
Activity Result 2.2	<i>Afforestation and ecosystem restoration measures on public land implemented through participatory approaches</i>	Start Date: December 08 End Date: December 2012
Purpose	There is little interest of local communities in afforestation and ecosystem restoration. The project will tackle this issue by demonstrating the conservation effect of low vegetation in demonstration plots through participatory approaches, accompanied by a public awareness campaign.	
Description	Use participatory approaches to implement afforestation measures on public land including conducting trainings, meetings and workshops at the local level	
Quality Criteria	Quality Method	Date of Assessment
- Participators stakeholder planning workshop - Voluntary contributions of local stakeholders to afforestation measures	Workshop reports, progress reports	End of year 2,3 and 4
Activity Result 2.3	<i>Responsibilities and duties for forests delegated to communal level, thus strengthening local stewardship</i>	Start Date: March 09 End Date: June 2013
Purpose	The strongest incentive for getting local communities involved in the conservation of forests and woodlands as well as in their rehabilitation is the delegation of user rights to them. Only if local communities have the right to make use of the restored forest land, will they be willing to make contributions to afforestation measures.	
Description	<ul style="list-style-type: none"> - Involve main key stakeholders throughout the design, implementation, and evaluation of practical measures. - Demonstrate at a few pilot sites how public participation can be initiated, - Delegate responsibilities and duties for forests to communal level (provision of land, labour force, etc.) 	
Quality Criteria	Quality Method	Date of Assessment
- Budget allocations for communities (municipalities) for afforestation - Number of key stakeholders involved in afforestation	Progress and evaluation reports	End of year 2 and 5
Activity Result 2.4	<i>Role of the private sector as provider of services and goods strengthened</i>	Start Date: April 09 End Date: April 2013

Purpose	As the private sector's capacities to provide goods and services for afforestation measures are weak, the support to the development of this sector is a challenging task. Many goods such as seedlings and saplings of autochthonous species could be provided by private firms, but they are at present practically not offered by them due to a lack of demand. The project will encourage firms to undertake investments in these fields, and will support such efforts	
Description	<ul style="list-style-type: none"> - Agree beforehand with private firms on purchasing prices for the seedlings to be used within the demonstration/pilot sites. - Provide technical support to those private firms 	
Quality Criteria	Quality Method	Date of Assessment
<ul style="list-style-type: none"> - Number of private firms offering services and goods related to sustainable forest management and forest restoration - Number and quality of saplings offered per year 	Progress and evaluation reports	End of year 2,3,4,and 5
Activity Result 2.5	<i>Local community based monitoring of the enforcement of the regulation on the protection of forests</i>	Start Date: March 09 End Date: May 2013
Purpose	Reduce violations	
Description	<ul style="list-style-type: none"> - Delegate responsibilities and duties for forests to communal level (protocols), thus strengthening local stewardship and ability to monitor and enforce forest regulations 	
Quality Criteria	Quality Method	Date of Assessment
Number of persecuted cases of violation	Progress and evaluation reports	End of year 2,3,4,and 5
Activity Result 2.6	<i>Good practice for SLM in woodland areas integrated in NRP</i>	Start Date: June 2010 End Date: April 2013
Purpose	The project will investigate innovative methods which ensure survival of seedlings, promote faster tree growth and reduce establishment costs. In this regards, the project will seek international expertise to identify most suitable technologies in the area of propagation (at the nurseries level), soil preparation, water harvesting, and tree management. These approaches and technologies are surely not innovative as a whole, but many are innovative for Lebanon, particularly for the National Reforestation Programme.	
Description	<ul style="list-style-type: none"> - Design and demonstrate a set of innovative technologies and instruments for the restoration of forest lands 	
Quality Criteria	Quality Method	Date of Assessment
Examples for good practice in SLM	Progress and evaluation reports	End of year 3 and 5
OUTPUT 3: Monitoring, learning, adaptive feedback and management.		
Activity Result 3.1	<i>Project understood by the government as national cross-sectoral effort</i>	Start Date: Sept 08 End Date: March 2013
Purpose	Efficiency and success in implementation of afforestation activities through involvement of all concerned national institutions	
Description	<ul style="list-style-type: none"> - Promote the perception of the project by the government as national effort 	
Quality Criteria	Quality Method	Date of Assessment
- Inter-ministerial Project Oversight Committee in place	Committee minutes of meetings, evaluation reports	End of year 1,2,3,4, and 5
Activity Result 3.2	<i>Assessment of the baseline situation of LD</i>	Start Date: July 08 End Date: March 09

Purpose	As Lebanon still lacks an effective LD national M&E system, the project will support during its first year some work related to statistics and data collection in order to better quantify the baseline situation and to build a LD M&E framework that will help assess the deliverables of the project as well as those of the NRP over the 20 years of execution		
Description	<ul style="list-style-type: none"> - Collect statistics and data in order to better quantify the baseline situation and to build a LD M&E framework 		
Quality Criteria	Quality Method	Date of Assessment	
- Assessment report	Progress reports	End of year 1	
Activity Result 3.3	<i>The project's performance is monitored and evaluated</i>		Start Date: June 08 End Date: June 2013
Purpose	Monitor project activities and results to ensure effective implementation		
Description	<ul style="list-style-type: none"> - Establish Project implementation Unit - Establish Project Board - Monitor impact according to the set logframe indicators 		
Quality Criteria	Quality Method	Date of Assessment	
Project activities implemented	<ul style="list-style-type: none"> • Progress reports • Project Implementation Review Reports (PIR) • TPR reports 	End of year 1,2,3,4,5	
Activity Result 3.4	<i>Project results and lessons learnt disseminated for replication</i>		Start Date: April 09 End Date: June 2013
Purpose	Disseminate project results and impact		
Description	<ul style="list-style-type: none"> - Conduct Mid-term evaluation - Conduct Final evaluation - Document project experiences and results - Disseminate generated information and lessons through national seminars and information sharing networks, existing regional information sharing network and global networks 		
Quality Criteria	Quality Method	Date of Assessment	
Lessons learned and impact data produced and disseminated	Progress reports	End of year 2,4 and 5	
Activity Result 3.5	<i>Awareness of decision-makers and the concerned communities for the importance of forest ecosystems for sustainable livelihood increased</i>		Start Date: January 09 End Date: June 2013
Purpose	<p>In Lebanon, there is still insufficient public understanding for the function of forests in conserving soil and water, and thus finally in securing food and ecosystem stability. Many afforestation measures (including many of those initiated by NGOs) are therefore conducted in the frame of landscape planning to increase the esthetical value of the landscape, without taking the ecological requirements seriously into account. Through an intensive public-awareness campaign, the project will show to the public the need of combating land degradation and of restoring degraded land, for securing rural livelihood.</p>		
Description	<ul style="list-style-type: none"> - Conduct awareness campaign on importance of forest ecosystems for sustainable livelihood 		
Quality Criteria	Quality Method	Date of Assessment	
Assessment report	Progress and evaluation reports	End of year 2,3,4 and 5	

VII. LEGAL CONTEXT

72. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of Lebanon and the United Nations Development Programme, signed by the parties on 10 February 1986.
73. The UNDP Resident Representative in Lebanon is authorized to effect in writing the following types of revisions to the Project Document, after consultation with the project partners:
- Revision of, or addition to, any of the annexes to the Project Document;
 - Revisions which do not involve significant changes to the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation;
 - Mandatory annual revisions which re-phase the delivery of agreed project outputs or increased expert or other costs due to inflation, or take into account agency expenditure flexibility; and
 - Inclusion of additional annexes and attachments
74. The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds.

VIII. RISK ANALYSIS

75. The risks confronting the project have been carefully evaluated during project preparation, and risk mitigation measures have been internalized into the design of the project. The project strategy includes adaptive management and will continually monitor if the assumptions continue to stand. Mitigation measures were considered and incorporated in the design of the project.
76. Forest fires may threaten/undermine the achievements of the project. – While this risk is uncontrollable, the Government of Lebanon is implementing a strategy to improve the control and prevention of forest fires; as demonstrated throughout the Mediterranean basin, this risk might become increasingly threatening as a result of climate change. Site selection for this project will take into account the existence of near-by fire monitoring and control stations.
77. Security risks in Lebanon after the 2006 conflict have been carefully assessed and evaluated. While some risks continue to exist, mainly in the South of Lebanon, they are expected to change by the time implementation starts. The clearing of unexploded cluster bombs from southern Lebanon progresses steadily, and they will no longer constitute a significant potential threat to project implementation. All of the UNDP's 45 ongoing projects (US\$ 70M) across different sectors and programmes remain fully functional.

#	Description	Date Identified	Type	Impact & Probability (1= low, 5=high)	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
1	Local populations are not interested in the realisation of community activities and global development objectives.	Project initiation date	Operational	P = 1 I = 4	It is assumed that local needs for improving land management are so high that this is unlikely. Additionally, the project will conduct strong communication campaigns, regular awareness raising and information campaigns.	UNDP/MoE			
2	The expectations of local stakeholders from the project and the state are too high, and communities are therefore not ready to make significant contributions.	Project initiation date	Operational	P = 2 I = 3	The conditions of local contributions have been set at a reasonable and modest level and are comparable to those of similar projects in the region.	UNDP/MoE			
3	Heavy administrative procedures, mainly related to expenditures	Project initiation date	Financial	P = 2 I = 2	The project will build on the experiences and modalities developed for other GEF projects in the country.	UNDP/MoE			

4	modalities and processing project achievements and progress under the NRP	Project initiation date	Operational	P = 3 I = 4	Site selection for this project will take into account the existence of near-by fire monitoring and control stations; furthermore, the project will work closely with other initiatives spearheaded by MOE and national NGOs aimed specifically at developing and implementing a forest fires management strategy for the country.	UNDP/MoE		
5	Political instability may focus the public interest to areas other than environmental issues	Project initiation date	Political	P = 2 I = 2	Despite the fact that the country is situated in a difficult political situation, no direct influence on the activities of ongoing environmental projects is noted.	UNDP/MoE		
6	Political instability may not be in favour to passing the amendment to establish a forest management and rehabilitation authority	Project initiation date	Political	P = 2 I = 2	UNDP Lebanon works closely with the Lebanese parliament through a support programme, which provides a dynamic platform for information sharing among parliamentarians, coordinating reviews of development projects and sectoral national priorities including environment. This programme will constitute a vehicle to facilitate debates, elaboration and adoption of the draft law. Nevertheless, the parliament is presently not convening due to the current political situation in the country. Not convening for the years to come is unprecedented considered very unlikely to happen.	UNDP/MoE		

IX. ANNEXES

ANNEX 1 – TERMS OF REFERENCE

<i>Position Titles</i>	<i>\$/ person week</i>	<i>Estimated person weeks</i>	<i>Tasks to be performed</i>
For Project Management			
<i>Local</i>			
Project Manager/Administration	462	120	<ul style="list-style-type: none"> • Development of detailed annual project work plans; • Organisation of steering committee meetings and technical meetings; • Ensuring coordination among different national stakeholders and between them and UNDP-Lebanon; • Securing timely reporting (substantive and financial) of the overall status of project activities to UNDP/GEF, by reviewing and reporting on technical reports; • Preparation of Annual Project Implementation Reports (PIR) for submission to GEF; • Securing proper archiving of all project documents; • Securing efficient and timely disbursement of funds; • Recruitment and undertaking all logistical operations for short-term international consultants; • Undertaking budget revisions, including mandatory revisions, according to decisions taken by the Steering Committee.
Project Assistant	250	120	<ul style="list-style-type: none"> • Taking minutes of meetings, preparing draft notes, memoranda, correspondence and briefings; • Establishing, maintaining and updating an accessible filing system including all incoming/outgoing mail and other documents, data entry and registration; • Drafting contracts, financing agreements, memoranda of understanding and other legal documents under the guidance of UNDP and MoE; • Processing requests for direct payments (RDPs), purchases and maintains records of transactions and accounts; • Assisting the organization of travel of short-term consultants; • Assisting the preparation of expenditure forecasts and other control reports including status of allotments as well as reports used for

			<p>control purposes such as telephone charges, liberty mileage, DSA payments and other commitments;</p> <ul style="list-style-type: none"> • Preparing budget estimates, monitoring expenditures and maintaining close contact with UNDP Beirut.
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For Technical Assistance			
<i>Local</i>			
Project Manager/Technical Advisor	462	120	<ul style="list-style-type: none"> • Overall coordination of the implementation of the project activities; • Formulation of job descriptions and definition of the scope of work for local consultants and sub-contractors in coordination with UNDP and MoE, • Overseeing and ensuring timely delivery of the work of all short-term consultants and sub-contractors, thereby helping to ensure the high quality and utility of their outputs; • Provision of publicity and awareness for the project at the national level; • Conducting technical workshops on village/municipality level; • Selection of afforestation sites together with other stakeholders and experts; • Conducting training on participatory methods for local groups;
Technical Field Coordinator	250	120	<ul style="list-style-type: none"> • Coordinate the field work of the project • Ensure Coordination among different national stakeholders • Conduction of project and site monitoring under the guidance of the Project Coordinator and/or external experts; • Assisting in scheduling, preparing and organizing national and local meetings, workshops, preparation of publications, and information dissemination; • Identification of relevant stakeholders at the community level and assessing their respective roles (stakeholder analysis); • Carrying out activities on public awareness building for the project and for afforestation in general, together with relevant experts; • Assist in production of project technical reports
Legal experts	875	22	<ul style="list-style-type: none"> • Revise forestry law • Prepare draft bill and regulations
Organisational experts	875	22	<ul style="list-style-type: none"> • Institutional assessment • Set up organisational structure of a forestry agency • Refine available concepts

Trainers	875	45	<ul style="list-style-type: none"> • Conduct training measures on management, conflict resolution, project planning, organisational development, forestry techniques, forest planning, land use management, range management, participatory planning, etc.
Land use planners	875	10	<ul style="list-style-type: none"> • Mainstreaming of SLM into land use planning
Funding strategy	875	6	<ul style="list-style-type: none"> • Investigation of new funding opportunities • Assessment of the potential relevance of carbon trade for Lebanon
Forest and afforestation economist	875	28	<ul style="list-style-type: none"> • Identify potential incentives • Assess role of property right and usufructs • Strengthen ownership rights (draft regulations, agreements, etc.)
Collaborative afforestation management	875	25	<ul style="list-style-type: none"> • Conduction of participatory project planning • Introduce participatory forest management • Strengthening of the roles of local stakeholders
Forest administration	875	24	<ul style="list-style-type: none"> • Set up and/or strengthen local forest mission • Delegate responsibilities of municipalities • Train municipalities in forest management
Forest economist	875	18	<ul style="list-style-type: none"> • Train private service providers • Establish system which strengthens private investors
Organisational development	875	22	<ul style="list-style-type: none"> • Design forest/afforestation monitoring system • Conduct independent monitoring
Public Administration Reform Consultant	875	12	<ul style="list-style-type: none"> • Evaluate experiences and generalize them for replication • Re-design the NRP, taking best-practice in afforestation into account
Land use planner	875	10	<ul style="list-style-type: none"> • Assessment of baseline situation of LD in Lebanon
Project evaluator for Natural Resources Management	875	26	<ul style="list-style-type: none"> • Conduct annual monitoring for natural resources management
PR expert	875	8	<ul style="list-style-type: none"> • Develop a joint communication strategy for the project and for NRP • Conduct PR measures for local communities • Conduct special events for decision-makers
<i>International</i>			
Legal experts	3450	4	<ul style="list-style-type: none"> • Revise forestry law • Prepare draft bill and regulations
Organisational experts	3450	4	<ul style="list-style-type: none"> • Institutional assessment • Set up organisational structure of a forestry agency • Refine available concepts
Trainers	3450	16	<ul style="list-style-type: none"> • Conduct training measures on management, conflict resolution, project planning, organisational development, forestry techniques, forest planning, land use

			management, range management, participatory planning, etc.
Land use planners	3450	5	<ul style="list-style-type: none"> • Mainstreaming of SLM into land use planning
Funding strategy	3450	2	<ul style="list-style-type: none"> • Investigation of new funding opportunities • Assessment of the potential relevance of carbon trade for Lebanon
Forest and afforestation economist	3450	10	<ul style="list-style-type: none"> • Identify potential incentives • Assess role of property right and usufructs • Strengthen ownership rights (draft regulations, agreements, etc.)
Collaborative afforestation management	3450	9	<ul style="list-style-type: none"> • Conduction of participatory project planning • Introduce participatory forest management • Strengthening of the roles of local stakeholders
Forest administration	3450	7	<ul style="list-style-type: none"> • Set up and/or strengthen local forest mission • Delegate responsibilities of municipalities • Train municipalities in forest management
Forest economist	3450	5	<ul style="list-style-type: none"> • Train private service providers • Establish system which strengthens private investors
Land use planner	3450	3	<ul style="list-style-type: none"> • Assessment of baseline situation of LD in Lebanon
Project evaluators	3450	10	<ul style="list-style-type: none"> • Conduct midterm and final project evaluations

Working week for Nat. consultants equals to 5 working days (as they will usually be back home in the evening and over the weekend).

Working week for Int. consultants equals to 7 days (away from home).

ANNEX 2 – COST SHARING AGREEMENT