



LEBANON RECOVERY FUND
PROJECT DOCUMENT COVER SHEET

Participating UN Organisation: Food and Agriculture Organization of the United Nations	Sector: Forestry/Environment
Programme Manager Name: Werner Chakkalakal Address: FAO, Viale delle Terme di Caracalla, Rome Telephone: + 39 06 570 52403 E-mail: Werner.Chakkalakal@fao.org	Working Group Chair Name: Rami Samain Address: FAO Lebanon E-mail: rami.samain@undp.org
Project Title: Integrated forest fires management – forest fires prevention, forest fires fighting (control) and damaged forests assessment and rehabilitation Project Number: OSRO/LEB/703/UNJ	Programme/Project Location: South Lebanon, Bekaa, Mount Lebanon and North Lebanon.
Programme/Project Description: The project will comprise three main ways of intervention, one aiming at fire preventive measures, the second concentrating on fire fighting (control) and the third focussing on damaged forests assessment and rehabilitation	Total Programme/Project Cost: LRF: US\$2.6 million Government Input: Other: Total: US\$2.6 million
Development Goal and Immediate Objectives: Support early recovery and poverty alleviation through improved forest fires management (prevention, control, assessment & rehabilitation) and their associated benefits to environment and rural communities through: 1. Assessment of locations and extent of forest and other wooded land burned/affected; the environmental and socio-economic impacts on locations and local communities; assessment of cost of environmental degradation from forest fires. 2. Adoption and implementation of preventive measures aiming at forests protection from fires and other risks. 3. Adoption and implementation of control measures aiming at efficient forest fire fighting. 4. Rehabilitation of forests in areas that suffered from the July 2006 war and October devastating fires. 5. Restoration of livelihoods generated from the sound and sustainable use of forested trees (on the long run).	
Outputs & Key Activities: Prevention: <ul style="list-style-type: none">Establishment of a modern and efficient early warning system particularly in high risk; Research/development, implementation and monitoring of an integrated forest management programme. Control: <ul style="list-style-type: none">Maintenance and supply of software and hardware tools for fire fighting. Assessment & Rehabilitation: <ul style="list-style-type: none">Assessment of ecological/socio-economic losses; Identification/implementation of best restoration techniques per affected area as well as implementation; Upgrading and follow up of the National Reforestation Programme, as one of the restoration techniques. Cross-Cutting: <ul style="list-style-type: none">Promotion of research and development related to forest fires prevention and fighting; Organization of a targeted public awareness campaign; Organization of a training programme for local municipalities, communities and stakeholders; Human resources mobilization at both the public and the private sectors and encouragement of civil society initiatives; Law development and enforcement.	
Working Group Review Date: _____ RRC Review Date: _____ Steering Committee/Project Approval Group Approval Date: 5 November 2007	

On behalf of:
UN Participating Organisation

Chair, LRF SC



Name/Title

José M. Sumpsi, Assistant Director-General
Technical Cooperation Department

2. Logical Framework

Objectives	Measurable indicators	Means of verification	Important assumptions
<u>Development Objective</u> Supporting early recovery and alleviating poverty through improved forest fires management (prevention, control, assessment & rehabilitation)	Forest protection improved (# of forest area burned reduced over 10-yr statistics) and forest area increased	Field surveys/ satellite images Questionnaires # of rural job opportunities created	Proper follow up by implementing organization and collaboration of partners and stakeholders
<u>Immediate Objectives:</u> 1. Assessment, through satellite images and field surveys,, the exact locations and extent of forest and other wooded land burned or affected as well as their environmental and socio-economic impacts on the locations and local communities; and assessment of the cost of environmental degradation from forest fires 2. Adoption and implementation of preventive measures aiming at forests protection from fires 3. Adoption and implementation of control measures aiming at efficient forest fire fighting 4. Rehabilitation of forests in areas that suffered from the July 2006 war and October devastating fires. 5. Restoration of livelihoods generated from the sound and sustainable use of forested trees.	Damaged sites exact locations identified Field survey questionnaire analysed / comparison of satellite images acquired at different dates Cost calculated Frequency of fires reduced (forest area burned reduced) Both time and cost put for the complete control of fires reduced 100 ha. reforested; Forests in affected areas regenerated; MoE reforestation sites scanned for mines & one pilot area demined # of trees planted per species	Satellite images purchased / Map generated of forest and OWL damaged sites An assessment report generated from Satellite images analysis / field survey questionnaires Implementing agency's website; Programme/ project records & archives Forest fires database & Internal Security Forces reports Area of damage forests; Forest fires database; and National budget Satellite images Reports of demining agencies Field surveys (& success rate)	Assumption above + Use of forests by beneficiaries in a sustainable and responsible way.
Objectives	Measurable indicators	Means of verification	Important assumptions
<u>Outputs:</u> <u>Prevention</u> A modern and efficient early warning system established	System in place and functioning	Site visits and on-site testing	Proper follow up by implementing organization and collaboration of partners and stakeholders
Integrated forest management	Reservoirs, control towers	Site visits	Enactment of national budget

<p>program developed, implemented and monitored</p> <p><u>Control:</u> Software and hardware tools for fire fighting supplied and maintained</p>	<p>and other fire control infrastructures established;</p> <p>Forests properly grubbed, pruned and thinned, and resulting fuel properly managed</p> <p>Forest guards centres equipped with fire fighting tools;</p> <p>Forest Guards, Civil Defense, Army and local units (starting with AFDC) supplied with safety uniforms (including helmets and boots)</p> <p>Forest Guards, Civil Defense, Army and local units (starting with AFDC) supplied with manual tools kits for fire fighting (each kit will include as an example 4 water back sprayers, one chainsaw, one mower, 5 shovels, one first aid kits, 12 aluminium water bottles)</p> <p>AFDC provided with two forest fire truck for training & combating purposes & 4 forest fire trucks provided to hosts that can address environmentally sensitive areas, such as protected areas, or fire risk areas</p>	<p>Site/check inspections Amount of biomass removed</p> <p>Spot site visits; on site manoeuvring on the use of the tools</p> <p>Programme/project records (distribution list; financial cash flow, etc.)</p> <p>Programme/project records (distribution list; financial cash flow, etc.)</p> <p>Programme/project records (distribution list; financial cash flow, etc.)</p>	<p>by law</p> <p>Provision of enabling environment in public administration</p> <p>Presence of unfavourable weather conditions for fires</p>
<p><u>Assessment & rehabilitation</u> Ecological and socio-economic losses from forest fires assessed</p>	<p>Report published & national database on ecological and economic forest fires losses produced/ updated</p>	<p>Programme/project records (publications)</p>	
<p>Best restoration techniques for damaged forests identified, implemented and monitored</p>	<p>Booklet on best restoration techniques and restoration</p>	<p>Programme/project records (publications)</p>	

Objectives	Measurable indicators	Means of verification	Important assumptions
The National Reforestation Programme, as one of the restoration techniques, upgraded and followed up	Capacity of nurseries surveyed & evaluated; amount of propagated seedlings increased Nursery established 100 ha of lands reforested in burnt areas and maintained for 2 years (pilot) 75,000 forest trees like <i>Pinus pinea</i> and carob trees planted in the selected areas Methods of monitoring & evaluation reviewed/enhanced	Evaluation report Site visit Reports on reforestation activities; Field observation and assessment reports Programme/ project records (publications) Scientific journals Press releases	Proper follow up by implementing organization and collaboration of partners and stakeholders Level of commitment of municipalities Follow up by Ministry of Justice & Ministry of Interior & Municipalities on legal cases Adoption by the Higher Council of Urban Planning and the Council of Ministers of the masterplans in high risk areas National budget enacted by law Presence of unfavourable weather conditions for fires Control of risk factors, grazing/ forest fires
<u>Cross-cutting</u> <i>Research and development related to forest fires prevention, fighting and rehabilitation promoted</i>	One detailed report/publication about the actual post-fire situation and recovery status of forests	Programme/ project records (distribution list and feedback) Reports of the public events	
<i>Public awareness campaign on forest fires prevention, fighting and rehabilitation organized</i>	Special targeted modes of communication to target population 7 public events in the main villages targeted or in clusters if possible	Reports of the training workshops and lists of participants	
<i>Training program, for local communities and stakeholders, on forest fires prevention, fighting and rehabilitation, organized</i>	11 training workshops on forest fires management (3 days each) & 6 follow up meetings (1 day each) 180 Officials from Forest Guards, Civil Defence, Army and civil society (starting with AFDC) trained on forest fires management	Site visits	
<i>Human resources mobilized for forest fires prevention, fighting and rehabilitation</i>	10 projects executed by municipalities and civil society	Programme/ project records (publications)	
<i>Forest related legislation developed and enforced</i>	Analytical booklet on forest related legislation (summary, gaps/overlaps, applicability & application); Draft legislation establishing a new agency for forest fires and masterplans in high risk areas		

ACTIVITIES:	INPUTS (in USD):		
<i>Instalment of early warning system for fire breakouts.</i>	200,000		
<i>Establishment of fire breaks</i>	50,000		
<i>Rehabilitation of infrastructure for combating fires.</i>	250,000		
<i>Equipments (6 fire trucks; safety uniform; 15 manual kits)</i>	500,000		
<i>Establishment of a nursery</i>	100,000		
<i>Reforestation of 100 ha - incl. seedlings production cost</i>	400,000		
<i>Initiation of demining in wooded lands</i>	175,000		
<i>Publications, Disseminations and 7 Public events</i>	50,000		
<i>11 training workshops on forest management reforestation and forest fire fighting (3 days each) and 6 follow up meetings (1 day each)</i>	80,000		
<i>Small Grants Programme</i>	300,000		
<i>Management (personnel, local travel, miscellaneous, agency management support)</i>	495,000		

3. Programme/Project Justification

The effect of the war of July 2006 was devastating at all levels, social, economic, and environmental. In particular, forests were either burned or became inaccessible due to the spread of millions of cluster bombs; this prevented people to access these forested areas which in turn resulted in poor forest management, loss of crops and livelihoods that were generated from the forests, as well as the halting of the National Reforestation Plan.

The difficult and time-consuming efforts needed to eliminate the danger of the cluster bombs necessitates the adoption of quick alternative measures aiming at restoring livelihoods for local communities and improving their incomes. Poverty in these regions is pushing people to take risk and access their fields which in turn lead to loss of human lives or permanent disabilities. In another approach, some people are exploiting other less affected or neighbouring areas and are thus putting more pressure on those areas, the outcome of which is great on environment and the forests ecosystem. It is therefore crucial to implement forestation and protection measures in accessible affected areas as well as in neighbouring ones in order to ensure the integrity of the forest ecosystem in the country.

Recent fires that erupted in October 2007 have shown that fires can spread at a tremendous speed to reach and link forests in different provinces because of the nature and size of forests in Lebanon which are continuous and interconnected. Therefore, a holistic approach for forest management should be followed with emphasis on less affected zones in conflict-affected areas. Of course, this has to be accompanied with proper conservation and protection arrangements and provision of proper training and equipment to ensure sustainable use of forested areas.

Eventually, the proposed programme/project will support local communities to restore a significant part of their forest damaged areas and to develop forest fires fighting mechanisms that will reduce the risk of fires and at the same time will push forward the cooperation with the public entities involved with forest fires targeting several areas across Lebanon.

This programme/project would play a significant role in Lebanon in general and in the South. Mount Lebanon and Bekaa in particular. The major elements that ensure the project sustainability can be summarized as follows:

- The project targets directly the concerned stakeholders with forest fires in Lebanon, mainly the Higher Relief Commission, the Ministry of Agriculture, the Ministry of Environment, the Ministry of Interior and Municipalities – Directorate General of Civil Defence, and the Ministry of National Defense – the Lebanese Army. It will empower those institutions to increase their effective intervention in forest fire control and management activities since it will work on upgrading their human and technical capacities.
- The rehabilitation process (assessment, selection of lands and restoration activities) to be used will stress on the high involvement of the local community and their active participation, which will ensure their adoption and ownership forward the project outputs.
- The provision of equipment and restoration of damaged areas will ensure income and benefits for the local community at the long term. And since more than 50% of the local communities in South Lebanon depend on their livelihood on forests and rangelands resources, therefore, they will make sure to sustain the project outputs.
- The provision of a modern and efficient early warning system for forest fires will help minimizing the adverse impacts of forest fires.

Finally, the proposed programme/project and its sub-projects will be part of the Ministry of Environment (MoE) and the Association for Forests, Development and Conservation (AFDC) national campaign for the management of forests in Lebanon (prevention, control and rehabilitation) that has been recently launched in cooperation with the various partners and stakeholders.

4. Management Arrangements

FAO, in close consultation with the MoE/AFDC, and in coordination with various partners as per the table below, will be responsible for project implementation over a timeframe of two years. MoE and AFDC have signed a Memorandum of Understanding by a decision of the Council of Ministers dated 27 October 2007. A detailed workplan will be developed upon the completion of an inception mission and submitted by FAO. A project steering committee (PSC) will be established to overview the overall execution of the project. The PSC will include representatives of all involved stakeholders.

Partner	Role
Food and Agriculture Organization of the United Nations	Implementing UN Agency
Ministry of Environment	<ul style="list-style-type: none"> - National counterpart - Lead activity related to the assessment of ecological and socio-economic losses - Contribute to the development of the restoration plans for the targeted areas - Contribute to the reforestation activity - Public awareness and information sharing - Lead the law development & enforcement activity
Ministry of Agriculture	<ul style="list-style-type: none"> - Lead the integrated forest management program activity - Contribute to the development of the restoration plans for the targeted areas - Insure follow-up of trained forest guards and maintain tools delivered - assist all consultants and experts in the performance of their assigned tasks - facilitate access by the project personnel to official documents and meetings with government officials
Lebanese Agriculture & Research Institute	<ul style="list-style-type: none"> - Contribute to the establishment of the early warning system activity - Contribute to activities related to assessment of ecological/socio-economic losses - Lead the activity related to the identification of best restoration techniques - Contribute to the activity related to reforestation (study of rehabilitation variables & inherent risk) - Lead the activity related to research and development
Ministry of Interior & Municipalities – Directorate General of Civil Defense	<ul style="list-style-type: none"> - Maintain the fire trucks and kits - Contribute to the activity related to the assessment of ecological and socio-economic losses - Contribute to the awareness campaigns that will be organized in the local communities - Contribute to the training activity assist in identifying the training needs of the civil defense members assist in the development of the training program ensure follow-up with trained officials
Ministry of Interior & Municipalities – Local Authorities	<ul style="list-style-type: none"> - contribute to the activity related to the assessment of ecological and socio-economic losses - Contribute to the development and implementation of restoration plans - Contribute to the reforestation activity - Participate to the human resource mobilization activity (small grant programme) - coordinate and cooperate with all related partners
Ministry of National Defense – Army	<ul style="list-style-type: none"> - contribute to the restoration and rehabilitation activities under the de-mining sub-activity in the national border area (border area) - Contribute to the awareness campaigns that will be organized in the local communities - contribute to the training activity assist in identifying the training needs of the army members assist in the development of the training program ensure follow-up with trained officials
AFDC and its local units	<ul style="list-style-type: none"> - implement the activity related to the establishment of the early warning system - Purchase of equipment and tools as well as maintenance of equipment/tools - provide fire and safety kit - contribute to the activity related to the assessment of ecological and socio-economic losses - Contribute to the reforestation activity - Contribute to the follow-up of the trained forest guards - implement the establishment of early fire detection - implement the reforestation activity - implement the awareness campaign activity and the training activity - implement the small grant programme in coordination with MoE - Field coordination with local groups and local authorities
Other Community Based Organizations	<ul style="list-style-type: none"> - Participate to the human resource mobilization activity (small grant programme)

5. Analysis of risks and assumptions

Due to the diversity in the nature of the programme/project activities, the potential emergence of issues that may put the project at a serious risk seems to be very minimal (except those mentioned in the risk analysis and assumptions below). MoE is committed to the follow up and the optimization of using these outputs especially in light of the ongoing programs and projects that MoE and partners conduct in the same field. Also, as mentioned earlier, these outputs are very well in line with the scope of work of MoE and the various partners. As such, long-term benefits of the programme/project are ensured not only because of their initial design but rather by their nature as part of the partners' cumulative efforts in this field.

This project/ programme will hopefully be the first in a long-term programme and it will act as a catalyst for leveraging resources (human, material, financial and other types) from other interested global partners.

Assumption	Actions to reduce risk
Clear mechanism of cooperation with the Ministry of Agriculture	<p>High involvement, efficient participation and commitment of partners as per the table outlining the partners' roles.</p> <p>Prime Minister's issuance of a decision to establish an inter-ministerial committee, with other stakeholders as partners</p>
Clear mechanism of cooperation with the Lebanese Agriculture Research Institute	
Clear mechanism of cooperation with the Ministry of Interior and Municipalities - Civil Defense	
Clear mechanism of cooperation with the Ministry of Interior and Municipalities - Local Authorities	
Clear mechanism of cooperation with the Ministry of National Defense - Lebanese Army	
Clear mechanism of cooperation with AFDC	Memorandum of Understanding between MoE and AFDC
Involvement of the local community groups	Increase awareness of the direct role of local community groups and try to supply municipalities with their (increased/) share from the municipal fund
Land ownership problems and exact identification of beneficiaries	Target areas to be identified in close consultation and involvement of local municipalities and concerned beneficiaries
Enabling environment for efficient and effective public administrative coordination and over burdening of some public agencies with multiple/emergency mandates	<ul style="list-style-type: none"> - Establish proper coordination and cooperation mechanisms between partners through a detailed distribution of tasks at the programme/project start, and conduction of regular coordination meetings - Reporting to the Presidency of the Council of Ministers, as a follow up to the Prime Minister's decision to establish an inter-ministerial committee
Accessibility and safety of forest lands	In collaboration with the Lebanese army, as mentioned above, identify the existing risks in the assessed areas, select accessible and safe lands for restoration, and undertake demining operations where feasible

6. Programme/Project Budget

The budget would utilise the Standard Format agreed by UNDG Financial Policies Working Group.

CATEGORY	ITEM	UNIT COST	NUMBER OF UNITS	TOTAL COST (US\$)
1. Personnel Incl. staff, consultants and experts				250,000
2. Contracts Incl. companies, professional services, grants to municipalities and civil society				300,000
3. Training & public awareness Incl. publication and dissemination				130,000
4. Supplies and commodities				-
5. Equipment, constructions, nurseries and field work	5.1- <i>Instalment of early warning system for fire breakouts.</i> 5.2 <i>Establishment of fire breaks</i> 5.3 <i>Rehabilitation of infrastructure for combating fires.</i> 5.4 <i>Equipments (6 fire trucks; safety uniform; 15 manual kits)</i> 5.5 <i>Establishment of a nursery</i> 5.6 <i>Reforestation of 100 ha including seedlings production cost</i> 5.7 <i>Initiation of demining in wooded lands</i>	200,000 50,000 250,000 500,000 100,000 400,000 175,000		1,675,000
6. Local Travel				20,000
7. Miscellaneous				55,000
8. Agency Management Support (7%)				170,000
TOTAL				2,600,000



**Submission Form
To
The Lebanon Recovery Fund Steering Committee**

To be completed by the Recovery and Reconstruction Cell (RRC)	
Meeting No:	Date of Meeting:
Item No:	Programme/project

*(To be completed by the Participating UN Organisation
and endorsed by Working Group Chair)*

To: Lebanon Recovery Trust Fund Steering Committee	Date of Submission: 1 November 2007
From: FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS	Contact: Name: Werner Chakkalakal Address: FAO, Via delle Terme di Caracalla, Rome Telephone: +39 06 570 52403 E-mail: Werner.Chakkalakal@fao.org
Through: Working Group <input checked="" type="checkbox"/> Endorsement <input type="checkbox"/> Comments	Contact: Telephone number, email Name: Rami.Samain@undp.org Address: FAO Lebanon E-mail: rami.samain@undp.org
Proposed submission, if approved would result in: <input checked="" type="checkbox"/> Continuation of existing programme/project <input type="checkbox"/> New programme/project <input type="checkbox"/> Other (explain)	Proposed submission resulted from: <input type="checkbox"/> National Authorities initiative within national priorities <input checked="" type="checkbox"/> UN Agency initiative within national priorities <input type="checkbox"/> Other: Donor initiative within donor sector priorities
Programme/project title: Integrated forest fires management – forest fires prevention, forest fires fighting (control) and damaged forests assessment and rehabilitation	
Amount of funds requested for proposed programme/project: 2,600,000 USD	
Estimated number of beneficiaries: Direct: 14 municipalities inflicted by forest fires; 6 central administrations; one NGO (and potential 10 other NGOs) Indirect: General rural population of Lebanon benefiting from forest resources	
Request against specific earmarking or unearmarked: Unearmarked	
Amount of indirect costs requested: 170,000 USD	

1. Background

Forests in Lebanon are a unique feature in the arid environment of the Eastern Mediterranean. Until June 2006, they covered along with the woodlands around 13% of the overall area of Lebanon (Land Use Land Cover map of Lebanon, 2002 & Ministry of Agriculture/FAO Forest Resources Assessment Project, 2005). Lebanese people in general and rural communities in particular have traditionally benefited from forest resources in various ways: forest flora is exploited for beekeeping, pine trees are a valuable source of income, wood collection and charcoal as well.

This characteristic tends to disappear with the extreme damages caused in the past 20 years. The reports of the Forestry Service at the Ministry of Agriculture (MoA) indicated that 1200 ha of natural forests are burned yearly. Forest fires data related to the last three years, as extracted from the Ministry of Environment's (MoE) forests fires database, which is based on the reports of the Internal Security Forces, indicated 129 fires in 2004 which resulted in 585 ha of burnt forest areas; 117 fires in 2005 (~ 440 ha of forest areas) and 144 fires in 2006 (~ 874 ha of forest areas), spread all over Lebanon. According to the Association for Forests, Development and Conservation (AFDC) studies in this regard, 1500 ha to 3000 ha of forest areas are threatened annually with forest fires, and the number of forest fires that occurred between 1993 and 2005 is 70,600 fires all over Lebanon. According to the study conducted by AFDC through the EU funded project "Towards a Sustainable Mechanism for Forest Fires in Lebanon" in 2005, the first national fire risk map was produced with a geographic database. This study indicated that 28% of Lebanese territory is affected by a medium risk of fires. This percentage may increase if no appropriate management of resources is considered. High and very high fire risk classes cover 575 km², representing 5.5% of the total area of Lebanon. This is associated with a high economic impact. According to the report of the World Bank on the cost of environmental degradation in Lebanon (published in 2004), cost associated with the deterioration of land and wildlife amounts to ~ 100 million USD/yr (i.e. 0.6% of the GDP of Lebanon).

During the last 15 months, forested areas in Lebanon suffered from a major decline. More than 3000 ha (2.2% of total forests) were either burned or blocked for access by local people. Main causes for this loss were the multiple adverse impacts of the war of July 2006 compounded by the disastrous fires of October 2007.

More than 1400 ha of forested area were either burned during bombing or remain inaccessible because of the presence of more than 2 million cluster bombs that are distributed between trees and agricultural fields. Add to this, the tens of hectares that remain unused because of previous landmines that were planted during previous conflicts. Demining priorities post-war focussed on urban areas, as priority areas, thus leaving wooded lands as a less priority. This left land resources unavailable to support livelihoods of rural communities. All this resulted in people trying to exploit other less affected areas and thus in more pressure on forests and natural resources in those areas, or in people choosing to migrate to urban cities. An assessment made by the AFDC in collaboration with the Society for Austro-Arab Relations in 26 war-affected southern villages revealed that around 713 ha of forests (pine, oak and other species) and 310 ha of olive groves were damaged.

Cumulative economic losses of forestry and agriculture due to the war was estimated at around 140 million USD Based on the fact that all forest trees and olives take several years to become productive. It is also important to bear in mind that the magnitude of the damage differs from one site to another for example stone pine (*Pinus pinea*) forests are located on sandstone soils, and are unable to regenerate. On the other hand *Brutia* pines (*P. brutia*) will rapidly regenerate after a fire, although soil is subject to degradation and erosion, Broadleaved forests and other wooded lands will regenerate if the fire is not totally destructive. Add to this the fact that sometimes shepherds may start grazing in burned areas which might jeopardize the regeneration process of the original vegetation cover: Fodder species and grass maintain the ability to regenerate quickly after fire provided they are not subjected to grazing which could delay regeneration for several years subsequently resulting into the losses of benefits from certain products and services (e.g., pine nuts, fuel wood, charcoal, honey and ecotourism).

October the 2nd 2007 till the 23rd was a black period for green Lebanon, enormous and simultaneous fires broke out in several forests and led to the destruction, sometimes irreversibly,

of another 2,225 ha of forests (~ 1.7 million trees) of different landcover types, an area much larger than the area that was forested during the past 17 years in the country. The fires expanded at a stunning speed and reached crops and houses in several villages due to the existing conducive climatic conditions such as fast winds and hot weather. In spite of the tremendous efforts made by the army, the civil defence and local people in extinguishing the fires, still rescue operations were inefficient because of the insufficient equipment and difficulties to reach certain areas with the available fire trucks. Many of the forests destroyed by the flames were lost forever without any possibility of regeneration (i.e. the forests which were burned down twice within a period of 10 years cannot produce any more cones and therefore cannot naturally regenerate anymore). Replanting the 3,625 hectares would cost not less than \$14 million US dollars.

A major factor contributing to deforestation is climate change. Lebanon's first national communication report to the United Nations Framework Convention on Climate Change (1996) included a vulnerability assessment map of terrestrial ecosystems and natural habitats under climatic. This report is currently being updated and the second national communication report is expected to be released in 2009. Another factor contributing to deforestation is related to the modest intervention of the concerned ministries. Any efforts in forest rehabilitation must therefore, be accompanied with a proper conservation programme for protection of new as well as existing forests. In addition, modern techniques for monitoring fires outbreaks such as early warning systems should be introduced and public awareness should be raised. On the other side, people in rural areas have historically depended on forests and rangelands for their livelihoods, which makes it an incentive for local communities to protect the natural resources from loss. Also, in most rural areas, forests and agricultural (i.e. olive groves) areas are integrated together making them strongly related. Therefore, any sustainable forest resource management approach requires addressing both types of lands.

Various complementary programmes and projects have attempted at better managing forest fires; these include:

- The French government funded a project in 1996 at the MoA to establish a national forest fire plan. This was later elaborated by the MoE in a strategy for combating forest fires, approved by the Council of Ministers in 2002 (decision # 4, date 23/5/2002).
- An assistance project to the protection of the land cover in Lebanon was executed by the MoA between 1997 and 1999, with a funding from the European Union. The project resulted in the establishment of a sustainable management plan in three different forests (Cedar forests of Hadath El Jebbe – North Lebanon; Oak forests of Jabal Moussa – Mount Lebanon; Oak forests of Kefraya - West Bekaa). Another output was the publication of three booklets titled « *Le VADE-MECUM du gestionnaire des forêts et d'espaces naturels au Liban : Comment établir un Plan de Gestion Durable* »; « *Les principaux arbres du Liban : Le fascicule des essences forestières du Liban* »; « *TROIS NOTICES TECHNIQUES : Récolte et conservation des graines forestières, Pépinière de plants forestiers et Reboisement* ».
- In 2001, the Lebanese government through the MoE initiated the National Reforestation Plan aiming at reducing the country's green cover loss through out the years¹. To date, 600 ha have been reforested with local species of forest trees such as cedars, oaks, pines, etc. in 45 municipalities all over the Lebanese territory.
- In the framework of the United Nations Convention for Combating Desertification, a national action program to combat desertification was developed by the MoA and partners in 2003. The program included a map of desertification prone areas. Local action programs are currently being developed.
- A number of NGOs have worked seriously on the subject of reforestation. AFDC in particular has accumulated significant experience from its establishment to date both on forest fire management and reforestation, through among others the EU funded project mentioned above "Towards a Sustainable Mechanism for Forest Fires in Lebanon".

2. Purpose of Proposed Programme/Project

- The objective of the proposed programme is to create the enabling environment for the Government of Lebanon to address through its early recovery efforts: 1) the prevention of

¹ Before that date, reforestation was done by Non Governmental Organizations (NGOs) and the MoA through the Green Plan.

future forests fires; 2) the efficient fighting of fires when they occur; 3) updating the assessment of the ecological damage resulting from the July 2006 war as well as by the enormous fires that were erupted simultaneously and repeatedly during October 2007 in different parts of the country; and 4) the rehabilitation of forests that were damaged during the July 2006 war and recent environmental disasters to allow for re-access of rural communities to their land resources (woodlands, forests, etc.) through the alleviation of obstacles, e.g. demining. 5) Carrying out a rapid assessment of the damage caused to the infrastructure of the forestry sector, institutions (disruption of the institutional set-up and its impact on the management of the sector and on the forest-dependent populations) and forestry personnel.

Forest rehabilitation initiatives are not only undertaken to respond to strict ecological concerns but also to enhance their contribution to rural communities by supporting their economy through a set of goods and services that are compatible with forest conservation and sustainable development. Therefore, through this support, not only will the total forested areas be increased and protected, but also rural communities in affected areas will again have alternative sources of livelihoods that will be generated from the sustainable and controlled use of forested trees.

3. Evaluation of Proposal

General principles and selection criteria		
(a)	Must be explicitly based on Lebanon's national priorities and needs, as noted in the public domain.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(b)	Must fall with the UN's mandate, and must address the Millennium Development Goals, directly or indirectly through a human rights-based approach.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(c)	Must promote and ensure national ownership.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(d)	Must be at an acceptable level of risk, within UN parameters.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(e)	Must fall within the areas of UN's comparative advantage.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(f)	The UN must be an appropriate system to deliver the intervention.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(g)	The UN response must be properly designed for and within the Sector setting, must be effective, coherent, context-sensitive, and cost-efficient and the outcomes, sustainable.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(h)	Must avoid duplication of and significant overlap with the activities of other actors.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(i)	Must build on existing capacities, strengths and experience.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(j)	Must promote consultation, participation and partnerships.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
If one or more of the above criteria is not met, please explain:		

Implementability

	2007	2008	2009
Estimated commitments (€mill)	—	—	—
Estimated disbursements (€mill)	—	—	—

Does the project correspond to national priorities? Yes ☒ No ☐

This project is in line with the Government of Lebanon's early recovery objectives of restoring livelihoods and rehabilitating damaged areas. It also falls within the Ministries of Environment and Agriculture main priorities to meet the national demand for forestation.

☒ Project approved by Line Ministry: Ministry of Environment (1 November 2007)

4. Review by Recovery and Reconstruction Cell (RRC)

Check on Programme/Project Proposal Format Contents

<input type="checkbox"/> Cover sheet (first page)	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Logical Framework	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Programme/Project Justification	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Programme/Project Management Arrangements	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Risks and Assumptions	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Budget	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Support Cost	Yes <input type="checkbox"/> No <input type="checkbox"/>

Overall review of programme submission
Recommendations

Elaborate

☒
☐

Approved with modification/condition
Deferred

for a total budget of USD 2.6 million

☐ **Deferred**

Reason/Comments

Elaborate

Chair of the LRF Steering Committee

.....
Signature

FEB.....8, 2008
.....
Date

6. Follow-up action taken by the Administrative Agent

☐ Project consistent with provisions of the Letter of Agreement with donors (if applicable)

.....
Signature

.....
Date