



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

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

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

<b>To:</b>  <b>Lebanon Recovery Trust Fund Steering Committee</b>	<b>Date of Submission</b>  <b>April 15<sup>th</sup> 2008</b>
<b>From:</b>  <b>United Nations Development Programme</b>	<b>Contact:</b> <div style="border: 1px solid red; height: 30px; margin: 5px 0;"></div> <b>UNDP Resident Representative</b> <b>United Nations Development Programme</b> <b>Arab African International Bank Bldg,</b> <b>Riad El Solh Street,</b> <b>Nejmeh, Beirut 2011 5211</b> <b>Lebanon</b> <b>Email: marta.ruedas.undp.org</b>
<b>Through: Working Group</b> <input checked="" type="checkbox"/> Endorsement <input type="checkbox"/> Comments	<b>Contact: Telephone number, email</b>
<b>Proposed submission, if approved would result in:</b> <input checked="" type="checkbox"/> Continuation of existing programme/project <input type="checkbox"/> New programme/project <input type="checkbox"/> Other (explain)	<b>Proposed submission resulted from:</b> <input type="checkbox"/> National Authorities initiative within national priorities <input checked="" type="checkbox"/> UN Agency initiative within national priorities <input type="checkbox"/> Other: Donor (Spanish Government) initiative within donor sector priorities
<b>Programme/project title: Flood Risks Prevention and Management in Baalback - Hermel.</b>	
<b>Amount of funds requested for proposed programme/project: 3,800,000 USD (equiv 2,500,000 Euros)</b>	
<b>Estimated number of beneficiaries:</b> <b>Inhabitants of all flood-affected villages in Baalback - Hermel particularly, Jdaide, Ras Baalback, Hermel and Al-Qaa. (more than 50,000 inhabitants)</b>	
<b>Request against specific earmarking: earmarked by the Government of Spain</b>	
<b>Amount of indirect costs requested: 7%: 266,000 USD (equiv. 175,000 Euros)</b>	

## 1. Background

During the July 2006 conflict, North Bekaa, particularly Baalback - Hermel area was directly affected by the war. Large scale destructions in infra structure, biodiversity and agriculture were reported. Agriculture in that area was directly affected: bombing resulted in big losses in crop yields that were either burned, not harvested or became unmarketable. Public irrigation infrastructure in the Bekaa was damaged. Cattle, goats and sheep were killed either because of shelling or due to starvation and thirst. Targeting of aqua farms in Hermel affected more than 30 fish farmers with an estimated total loss of about 300 tons of fish lost from ponds. In addition, the high security risk during the war stopped forest management activities and lack of fuel encouraged people to cut trees in forests and woodlands. Losses from biodiversity destruction were also enormous and could not be estimated

The conflict exacerbated the numerous existing socio-economic and environmental issues already facing this area. Baalback - Hermel in North Bekaa suffers from drought, poor agricultural productivity, loss of biodiversity, poverty (66% poverty in Hermel and 49% in Baalback) and in some years, floods caused by surface runoff water due to torrential rains, poor soil infiltration and deteriorated vegetation cover. Approximately fifty percent of the population of this area is thought to be employed in the agricultural sector.

The National Action Programme to Combat Desertification (NAP), which was developed in 2003 by the Ministry of Agriculture and in collaboration with UNDP and GTZ, classified the Northern part of Bekaa as one of the areas prone to high risks of desertification. This is mainly due to lack of proper land and water management practices, bad rainfall distribution, overgrazing, steep mountains with shallow soil and poor vegetative cover.

Heavy flooding following torrential rains in the Anti-Lebanon mountains are common in Northern Bekaa. They occur during May-June or later in autumn (October-November). In June 1987, heavy rainfall led to road cuts and destruction of bridges, telephones, electricity and water supply. Villages like Fakehe, Jdaide and Ras Baalback became completely isolated. At the agricultural level, heavy losses were reported for field crops, up to 80% of fruit trees in that area were damaged and a large number of cattle was drowned. Soil erosion was noticed over tens of kilometres (UNDRO report 87/1371, June 1987). They also occurred in June 1994, October 1999, May 2001, twice in 2004 and recently in May 15<sup>th</sup> 2007 where severe soil erosion was reported in addition to the substantial agricultural damage and destruction of several aqua farms along the Assi (Orontes) river.

In 2006, a project was launched in Al-Qaa region by the Ministry of Agriculture and the German Agency for Technical Cooperation (GTZ), in collaboration with the Arab Centre for the Studies of Arid Zones and Dry Lands (ACSAD). The project handled a 10 km<sup>2</sup> watershed area and established check dams, contour bunds and stone walls in addition to 3 collection lakes ranging between 20,000 - 40,000 cu. meters in volume. Early observations recorded after the recent torrential rains in 2007 showed a good level of flood prevention in that location.

In 2007, the Spanish Government through the Lebanon Recovery Fund approved a larger scale project in Baalback - Hermel aiming at flood risks management over an area of 100 km<sup>2</sup>, land cover rehabilitation and agricultural improvement through water harvesting and management. The project was launched in 2008 with direct execution by the United Nations Development Programme.

## 2. Purpose of Proposed Project

The objective of the proposed project is to assist the Government of Lebanon in its recovery efforts in the conflict-affected Baalback-Hermel region through adopting a set of measures aiming at prevention and management of risks caused by floods to allow the local communities to enjoy better living conditions and practice safer agriculture.

### 3. Evaluation of Proposals by the Working Group

Provide concise summary evaluation of proposal against:

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:		

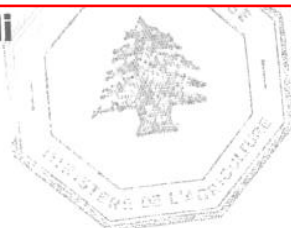
#### Implementability

	2009	2010	2011
Estimated commitments (\$mill)	—	—	—
Estimated disbursements (\$mill)	—	—	—

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

Please elaborate

Dr. Talal Sahili



#### 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

#### 5. Decision of the LRF Steering Committee

- ☒ Approved for a total budget of \$.....3,800,000  
☐ Approved with modification/condition  
☐ Deferred

Reason/Comments

Elaborate

September 19, 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

**LEBANON RECOVERY FUND  
PROJECT DOCUMENT COVER SHEET**

Participating UN Organisation: <b>United Nations Development Programme (UNDP)</b>	Sector: Agriculture / Environment
Programme/Project Manager <b>Name: Edgard Chehab</b> <b>Address: UNDP Lebanon</b> <b>Telephone: +961 (0)3 240034</b> <b>E-mail: edgard.chehab@undp.org.lb</b>	<b>Working Group Chair</b> <b>Name:</b> <b>Address:</b> <b>Telephone:</b> <b>E-mail:</b>
Programme/Project Title: <b>Flood Risks Prevention and Management in Baalback-Hermel.</b>	Programme/Project Location: <b>North Bekaa, Baalback-Hermel</b>
<b>Programme/Project Description:</b>  The project aims at assisting the Government of Lebanon in its recovery efforts in Baalback-Hermel region through adopting a set of measures aiming at prevention and management of risks caused by flash floods. The project will build on the results and experience generated by the currently executed LRF project "Flood Risk Management and Water Harvesting target for Livelihood Recovery in Baalback-Hermel" and will cover all the remaining watershed area (280 km <sup>2</sup> ) that is vulnerable to floods.	Total Programme/Project Cost:  <b>LRF: 3,800,000 USD (equiv 2,500,000 Euros)</b> <b>Government Input:</b> <b>Other:</b> <b>Total: 3,800,000 USD (equiv 2,500,000 Euros)</b> Programme/Project Duration: 3 years.
<b>Development Goal:</b> Sustainable development through ensuring environmental resources, poverty eradication and better land management.	
<b>Immediate Objectives:</b> <ol style="list-style-type: none"> <li>1. Restoration of livelihoods in conflict-affected &amp; poor rural areas in North Bekaa.</li> <li>2. Improving land and water management to reduce risks and damages caused by flash floods in Baalback-Hermel.</li> <li>3. Land cover restoration and protection.</li> </ol>	
<b>Outputs and Key Activities:</b> <ul style="list-style-type: none"> <li>• Construction of walls, dams and water-collection reservoirs to reduce the risk of flooding in Baalback-Hermel region.</li> <li>• Restoration of vegetative cover including wild fruit trees and pastures in order to reduce soil erosion.</li> <li>• Land Cover protection through creating alternative grazing options for local herders.</li> </ul>	
Working Group Review Date: _____ RRC Review Date: _____ Steering Committee/Project Approval Group Approval Date: _____	

On behalf of:  
 UNDP  
 Chair, LRF SC

## 7. Logical Framework

Objectives	Measurable indicators	Means of verification	Important assumptions
<b>Development Objective</b>  Sustainable development through ensuring environmental resources, poverty eradication and better land management.	- Damage caused by surface runoff and floods reduced. - Land cover area increased - Grazing pressure reduced.	Assessment of damages caused by floods	Continued government support and follow up by the implementing institution. Political stability in the country Sufficient collaboration from local communities and herders.
<b>Immediate Objectives:</b> 1. Restoration of livelihoods in conflict-affected & poor rural areas in North Bekaa. 2. Improving land and water management to reduce risks and damages caused by flash floods in Baalback - Hermel. 3. Land cover restoration and protection.	- Area of vegetative cover increased and restored  - Soil erosion reduced	Mapping of land Cover  Feedback from local communities in Baalback - Hermel	<b>(Immediate Objective to Development Objective)</b> Beneficiaries properly use and maintain the constructions and water reservoirs. Local communities get sufficient awareness and training to insure sustainability of the project.
<b>OUTPUTS:</b> 1. Risks and damages caused by flash floods managed and reduced 2. Land cover in risk areas increased and soil erosion reduced. 3. Sustainability ensured, capacity built and public awareness raised. 4. Alternative grazing options developed and adopted.	- Number of dams, walls and bunds constructed - Reduction in surface runoff water - Forested areas increased - Pastures area increased	Survey of beneficiaries in target areas.  Development of surface runoff coefficient maps  Mapping of land cover	<b>(Outputs to immediate objectives)</b> Improper maintenance of reservoirs and constructions Political or tribal disagreements
<b>ACTIVITIES:</b> 1. Data collection and analysis for soils and topography of target area. 2. Modelling of target watershed and map generation for constructions sites.	<b>INPUTS:</b> 20,000  80,000	Land surveys/mapping and soil analysis  Surveys/photos of construction	<b>(Activity to output)</b> Low level of collaboration from local communities and municipalities Political unrest and availability of labour force

3. <i>Constructions and excavations for runoff water control and management</i>	2,800,000	Assessment of water run-off	Landownership problems
4. <i>Identification of soil erosion sensitive sites.</i>	-	Organization of workshops and field visits	Disputes and disagreements among herders
5. <i>Nurseries establishment seeds and seedlings production.</i>	100,000	Before and after land cover maps	
6. <i>Pastures rehabilitation and management</i>	300,000	Assessment of grazing activities	
7. <i>Organization of grazing activities in target areas and promotion of alternative grazing options.</i>	100,000	Questionnaires	
8. <i>Raising public awareness on sustainable land management.</i>	50,000		
9. <i>Training of local farmers and concerned municipalities in maintenance of constructed structures water reservoirs</i>	50,000		
10. <i>Capacity building and empowerment of concerned municipalities</i>	300,000		

## 8. Project Justification

Baalback - Hermel includes two Cazas spread over an area of 285,000 ha and populated with around 193,000 inhabitants (153,000 in Baalback and 40,000 in Hermel). More than 50% of the inhabitants work with agriculture in spite of the prevailing drought conditions and spread of poverty in several villages especially in Hermel.

Flash floods due to torrential rains have increased in recent years in North Bekaa; at least 8 occurrences over the past 20 years, 5 of them occurred during the past 6 years. The floods cause enormous damages in agriculture, aqua farms and rural communities in general. Recent floods in May 2007 affected several aqua farms in Baalback - Hermel and resulted in the death of around 500 tons of fish. Flood protection practices in North Bekaa are not at an acceptable level; only local retaining walls have been executed on some rivers and were constructed to prevent collapsing of river's walls rather than to mitigate from floods.

The threats and damage caused by the floods in Baalback - Hermel area are expected to increase after the July conflict in 2006. This is mainly because of the direct and indirect damage that affected the forest and vegetation cover in that region (about 400 hectares of Junipers trees were partially affected by fires in this area), thus soil erosion is expected to increase and water retention by the vegetation to decrease, all what could potentially lead to more severe and erosive power of runoff water when torrential rain occurs since the roots of trees and crops hold the soil firmly together and prevent such erosion. Such floods result in the loss of the topsoil, the most fertile layer of soil needed for plant growth.

In this regard, the project will also work on the restoration of vegetative cover on the slope hills in Baalback - Hermel. Local communities will be given the support needed to establish nurseries for seedlings production as well as for reforestation and protection, priority will be given to wild fruit trees which are historically grown in the region such as wild pistachio, wild almonds, wild plums and wild pears. Efforts will be done to rehabilitate the pastures and organize grazing activities in the region and promote alternative grazing options for local herders. Forage drought tolerant shrubs such as *Atriplex* and others will be planted near the stone walls and contour bunds where soil moisture is expected to be more available.

The current project will complement the on-going LRF approved project "Flood Risk Management and Water Harvesting for Livelihood Recovery in Baalback - Hermel" because it will introduce flood risks control measures in the remaining watershed (280 km<sup>2</sup>). Both projects will thus be able to cover the complete area in Baalback - Hermel which is under direct threats from flash floods. In addition, the current project will introduce alternative grazing options for local herders in order to better protect the existing and reforested areas.

## **9. Management Arrangements**

### Implementation Arrangements

The following implementation arrangements will be undertaken:

- 1- Preparation of a realistic and achievable project workplan in collaboration with all project partners.
- 2- Collection of information related to studies and surveys executed in North Bekaa. The project will collaborate with and build on the partnership between MoA, GTZ and ACSAD and the work they did in Al-Qaa to prevent flood. Moreover, lessons will be learned from the currently executed UNDP project in Aarsal/Fakeha region.
- 3- Awareness workshops will be made for local communities on subjects related to flood prevention, soil erosion, desertification, maintenance of constructions and the importance and protection of vegetative cover.
- 4- Procurements will be made for machinery and equipments needed for maintenance of excavations and flood prevention structures.
- 5- Constructions of stone walls, contour bunds, check dams and collection lakes will be done in parallel in different selected sites (number to be specified by surveys and budget).
- 6- Establishment of nurseries for wild fruit trees, Junipers trees and forage species.
- 7- Work in collaboration with municipalities and local NGO's if available on forestation, pastures rehabilitation and specify their roles and responsibilities in their maintenance and protection from grazing.
- 8- Continuous technical follow-up and monitoring by UNDP, MoA, and other project partners will be undertaken during the various implementation phases to ensure that the objectives of the programme are met and lessons learned are documented.
- 9- UNDP will financially monitor and report on all disbursements of the programme and will ensure continued reporting to the Government of Lebanon and the Donor Country. Financial disbursements will be based on UNDP procedures.

### Project Timeframe

The implementation of the proposed programme is 3 years.

## Project Partners

The programme shall involve several concerned parties to ensure proper implementation of the programme's phases. These parties are the following:

- **Government of Spain/Spanish Agency for International Cooperation:** Donor country and international technical backstopper to the proposed programme
- **United Nations Development Programme :** Implementation agency (technical, management, supervision) of the proposed programme
- **Ministry of Agriculture:** National project partner and hosting institution.
- **Ministry of Energy and Water/Bekaa :** information sharing and coordination
- **Arab Centre for the Studies in Arid Zones and Drylands (ACSAD):** Technical expertise and supervision
- **German Agency for Technical Cooperation (GTZ):** information sharing and coordination
- **Local Experts :** Local consultants, focal points and supervisors
- **Municipalities and local communities :** National public institutes or entities and individuals benefiting from the proposed programmes

## **10. Analysis of risks and assumptions**

The barriers and risks that could face the execution of the proposed project include:

- a- Landownership problems of selected sites and agreements among beneficiaries on sharing grazing alternatives.
- b- Improper maintenance of reservoirs and constructions.
- c- Low level of interest from the local communities in the proposed measures to prevent floods.
- d- Insufficient government support and follow up to ensure sustainability after the termination of the project.
- e- Political instability
- f- Difficulties in securing enough labour workers for doing the constructions.

In order to manage and minimize these risks, the following measures will be done by the project:

- a- Ensure adequate coordination and involvement of the target municipalities.
- b- Ensure adequate amounts of training and awareness for local communities.
- c- Constructions and field work to be made during winter time and not to match with peaks of farming activities and harvest time.
- d- Ensure proper coordination among the relevant project stakeholders and partners.
- e- Intensify inputs and human resources to meet the deadline for work completion.

## 11. 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 (USD)
1. Personnel Incl. staff and consultants				300,000
2. Contracts Incl. professional technical services				250,000
3. Training				50,000
4. Transport (local)				30,000
5. Supplies and commodities				40,000
6. Constructions, field work and equipment.				2,800,000
7. Travel				40,000
8. Miscellaneous				24,000
9. Agency Management Support (7%)*				266,000
TOTAL (USD)				3,800,000

The above-mentioned budget of **3,800,000 USD (equiv 2,500,000 Euros)** will be fully funded by Government of Spain through direct contribution to the Lebanon Recovery Fund.