



## INTERIM PROGRESS REPORT

<b>Reporting UN Organization</b>	: United Nations Development Programme
<b>Country</b>	: Lebanon
<b>Project No.</b>	: 00059666 and 00069789
<b>Project Title</b>	: Flood Risk Management and Water Harvesting for Livelihood Recovery in Baalback-Hermel, phase I and II
<b>RF Signature date</b>	: 10 October 2007
<b>Project Start date</b>	: Phase I: 01 February 2008 Phase II: 20 February 2009
<b>Project Timeframe</b>	: Phase I: 31 May 2011 (extended) Phase II: 31 December 2011
<b>Reporting Period</b>	: July-September 2010

### I. PURPOSE

#### Project Summary & Objectives

The project aims at assisting the Government of Lebanon in its recovery and reform efforts in the conflict-affected and high-poverty region of Baalback-Hermel through better land management practices, namely flood risk reduction and improved access to irrigation water and networks to achieve crop diversification and improve productivity.. This will be achieved through the construction of stone walls, check dams and water collection reservoirs to prevent runoff water from reaching villages and farms and through the restoration of land cover to reduce soil erosion. The objectives related to water management will be achieved through construction of membrane-lined reservoirs to collect unused water from springs, rainfall and snow melts and through installation of water-use efficient irrigation networks and systems that will be used by local farmers to improve their crop diversity and productivity. The project is financed by the Government of Spain through the Lebanon Recovery Fund established on the occasion of the Stockholm Conference, and is in line with the UNDP's development goal of alleviating poverty in rural drylands of the conflict-affected Baalback Hermel area.

#### Project Phases and Expected Outputs

<b>FRM I</b> 2.8 million USD	<ul style="list-style-type: none"> <li>➔ Establishment and Implementation of a flood risk management plan over an area of 94 km<sup>2</sup> in Aarsal and Fakhe region.</li> <li>➔ Water harvesting in North Bekaa and installation of efficient irrigation networks.</li> <li>➔ Crop diversification and improved land cover in North Bekaa.</li> <li>➔ Improved public awareness on flood risks management and training of the target municipality on maintenance of flood management structures.</li> </ul>
<b>FRM II</b> 3.8 million USD	<ul style="list-style-type: none"> <li>➔ Establishment and Implementation of a flood risk management plan over an area of 200 km<sup>2</sup> in Upper Aarsal and Ras Baalback</li> <li>➔ Improved land cover in Ras Baalback and upper Aarsal mountains.</li> <li>➔ Improved soil conservation in Ras Baalback and Aarsal.</li> <li>➔ Improved public awareness on flood risks management and training of the target municipality on maintenance of flood management structures.</li> </ul>

## Project Linkages to National Priorities and Recovery

The National Action Program to Combat Desertification (NAP), which was developed in 2003 by the Ministry of Agriculture and in collaboration with UNDP and GTZ, classified the project's target area (Baalback-Hermel) 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. Moreover, summer droughts and uneven rain distribution are the main reasons for poor agricultural productivity in that area.

The effect of the July 2006 conflict on North Bekaa, particularly Baalback-Hermel area was not to be underestimated. Large scale destructions in infrastructure, biodiversity and agriculture were reported. These led to harder living conditions, more poverty and increased soil erosion threats.

The expected outcomes from the current project particularly those related to water harvesting, increased vegetation cover and higher productivity will serve very well the national efforts and plans aiming at combating desertification and alleviating poverty in North Bekaa. They will also serve the recovery efforts made by the Lebanese government in normalizing the living conditions of rural communities and in restoring the basic needs and infrastructure for practicing sound and profitable agriculture in the affected area.

## Project Implementation Partners

International Partners: Spanish Agency for International Cooperation  
German Agency for Technical Cooperation (GTZ)  
Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD)

National Partners: Ministry of Agriculture  
Ministry of Water & Energy, Bekaa  
Local municipalities and communities

## II. RESOURCES

	Amount (USD)	
	Phase I	Phase II
<b>Total budget approved</b>	2,834,880	3,800,000
<b>Total disbursements –July - September 2010</b>	<b>114,941.52</b>	<b>95,840</b>
<b>Commitments for next quarter</b>	550,000	400,000

**Budget and Expenditure Breakdown per LRF Category:**

CATEGORY	Phase I		Phase II	
	Total Budget (USD)	Exp. July - September 2010	Total Budget (USD)	Exp. July-September 2010
<b>1. Personnel</b> (Incl. staff and consultants)	200,000.00	0.00	300,000.00	78,205.00
<b>2. Contracts</b> (Incl. companies, professional services)	250,000.00	0.00	250,000.00	0.00
<b>3. Training</b> (incl. AV printing / production)	50,000.00	0.00	50,000.00	0.00
<b>4. Transport</b> (local)	20,000.00	522.50	30,000.00	2,271.27
<b>5. Supplies and commodities</b> (Incl. IT equipment and rental & maintenance)	50,000.00	0.00	40,000.00	269.82
<b>6. Equipment (including installation)</b>	2,000,000.00	106,899.49	2,800,000.00	0.00
<b>7. Travel</b>	50,000.00	0.00	40,000.00	8,186.80
<b>8. Miscellaneous</b>	37,833.00	0.00	24,000.00	638.00
<b>9. Agency Management Support (7%)</b>	186,048.00	7,519.53	266,000.00	6,269.96
<b>TOTAL</b>	<b>2,834,880.00</b>	<b>114,941.52</b>	<b>3,800,000.00</b>	<b>95,840.85</b>

### III. Results: Progress per activities

Project Outputs	Activities	Progress to date	Targets for 2010
<b>1. Project Management and Coordination</b>	1.1 Technical, financial and operational Management. 1.2 Promote synergies with relevant on-going projects in target area. 1.3 Exchange of information and coordination meetings	<ul style="list-style-type: none"> <li>Ongoing meetings with the project stakeholders (approximately 20 meetings in Arsal and 10 in Ras Baalback)</li> </ul>	<ul style="list-style-type: none"> <li>Strengthened coordination with project stakeholders</li> </ul>
			<ul style="list-style-type: none"> <li>Coordination with Municipality of Ras Baalback for phase II implementation</li> </ul>
			<ul style="list-style-type: none"> <li>Design of flood risk management structures for Phase II</li> </ul>
			<ul style="list-style-type: none"> <li>Procurement of sub-contractors for the implementation of Phase II</li> </ul>
			<ul style="list-style-type: none"> <li>Submission of quarterly progress reports</li> </ul>
<b>2. Flood Risk Management and Reduction</b>	2.1 Data collection and identification of target area. 2.2 Modeling of target area and generation of maps. 2.3 Constructions for flood control and prevention. 2.4 Monitoring, evaluation and impacts assessment	<ul style="list-style-type: none"> <li>Draft design of flood risk and erosion control structures for Phase II completed;</li> <li>Final designs for flood structure for Phase II are under review</li> <li>Expression of Interest documents under development for the selection of a contract for implementation of the flood structures for Phase II</li> </ul>	<ul style="list-style-type: none"> <li>Design of flood risk management structures (Phase II)</li> </ul>
			<ul style="list-style-type: none"> <li>Initiation of excavations of flood water collection reservoirs (Phase II)</li> <li>Initiation of construction of FRM structures (Phase II)</li> </ul>
			<ul style="list-style-type: none"> <li>Development of a flood mgt plan for Ras Baalback (phase II)</li> </ul>
			<ul style="list-style-type: none"> <li>Determine the number and locations of stone walls for phase II.</li> </ul>
			<ul style="list-style-type: none"> <li>Establishment of an artificial irrigation lake in Deir Al-Ahmar (Phase I)</li> </ul>
<b>3. Water Harvesting and Irrigation Networks</b>	3.1 Field surveys and assessment of water resources 3.2 Identification of water-harvesting sites. 3.3 Constructions of reservoirs and irrigation networks 3.4 Selection of beneficiaries and technical advice	<ul style="list-style-type: none"> <li>Work in progress for the Deir El Ahmar Pond</li> <li>Finalization of feeding channel and irrigation main lines.</li> <li>Follow-up of site operations on-going</li> </ul>	<ul style="list-style-type: none"> <li>Installation of irrigation networks for target beneficiaries (Phase I)</li> </ul>
			<ul style="list-style-type: none"> <li>Rehabilitation and completion of reservoir initiated by the Army in Barka (Phase I)</li> </ul>

<b>4. Land Cover Increase and Soil Erosion Reduction</b>	4.1 Identification of erosion-sensitive areas 4.2 Establishment of nurseries for seedling production 4.3 Crop diversification and increased productivity 4.4 Forestation and forage cultivation	<ul style="list-style-type: none"> <li>• Initiation of seed collection process</li> <li>• TORs for bidding of reforestation activity finalized. Request for proposals under development by procurement department; should be posted shortly</li> <li>• On-going collaboration with the UNDP MOE reforestation project to draft technical specification for reforestation activity and to coordinate the areas to be planed</li> <li>• Development of a demonstration setup for reforestation in order to test and demonstrate best techniques</li> <li>• Collaboration with MoA on banning and/or controlling grazing in the area</li> </ul>	<ul style="list-style-type: none"> <li>• Forestation in Ras Baalback with wild fruit trees (Phase II)</li> <li>• Development of plan to increase green cover in Ras Baalback (Phase II)</li> <li>• Completion of reforestation in Aarsal (Phase I)</li> </ul>
<b>5. Sustainability, capacity building and awareness raising</b>	5.1 Empowerment of target beneficiaries. 5.2 Awareness raising on flood and water management. 5.3 Capacity building through training. 5.4 Alternative livelihoods	<ul style="list-style-type: none"> <li>• Hands on training on flood management structure needs initiated on a one-on-one basis with some municipality members</li> </ul>	<ul style="list-style-type: none"> <li>• Building the capacity of Municipality of Ras Baalback in flood management.</li> </ul>

## Implementation Constraints

- The capacities of different contractors to perform has slowed down work. The project is supporting the different contractors on the field to maximise efficiency and is closely coordinating between the consultant designing the Deir El Ahmar reservoir and the contractor implementing the works on the ground.

## Key Partnerships & Collaboration

The project is working closely with the Disaster Risk Management Project being implemented by the Office of the Prime Minister, managed through UNDP , which is working on disaster risk management at the institutional level.

## IV. Work plan per activity for the 3rd quarter in 2010 (July-Sep 2010).

Key Milestones Wks	Oct				Nov				Dec			
	1	2	3	4	1	2	3	4	1	2	3	4
<b>1. Project Management and Coordination</b>												
1.1 Technical, Financial and operational mgt.												
1.2 Promotion of synergies with other projects												
1.3 Information exchange and coordination.												
<b>2. Flood Risks Management and Reduction</b>												
2.1 Data collection and identification of target area.												
2.2 Modelling of target area & generation of maps.												
2.3 Constructions for flood control and prevention.												
2.4 Monitoring, evaluation & impact assessment.												
<b>3. Irrigation Water Harvesting and Networking</b>												
3.1 Construction of water harvesting pond in Deir el Ahmar												
<b>4. Land Cover Increase &amp; Soil Erosion Reduction</b>												
4.1 Forestation and forage cultivation												
4.2 Identification of planting areas in Ras Baalback												
<b>5.Sustainability, Capacity Building &amp; Awareness Raising</b>												
5.1 Empowerment of target beneficiaries.												
5.2 Awareness raising on flood and water mgt.												
5.3 Capacity building through training.												
5.4 Alternative livelihoods												