



INTERIM PROGRESS REPORT

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

FRM I 2.8 million USD	<ul style="list-style-type: none"> ➔ Establishment and Implementation of a flood risk management plan over an area of 94 km² in Aarsal and Fakhe region. ➔ Water harvesting in North Bekaa and installation of efficient irrigation networks. ➔ Crop diversification and improved land cover in North Bekaa. ➔ Improved public awareness on flood risks management and training of the target municipality on maintenance of flood management structures.
FRM II 3.8 million USD	<ul style="list-style-type: none"> ➔ Establishment and Implementation of a flood risk management plan over an area of 200 km² in Upper Aarsal and Ras Baalback ➔ Improved land cover in Ras Baalback and upper Aarsal mountains. ➔ Improved soil conservation in Ras Baalback and Aarsal. ➔ Improved public awareness on flood risks management and training of the target municipality on maintenance of flood management structures.

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
Total budget approved	2,834,880	3,800,000
Total disbursements April - June 2010	20,942	67,458
Commitments for next quarter	350,000	107,000

Budget and Expenditure Breakdown per LRF Category:

CATEGORY	Phase I		Phase II	
	Total Budget (USD)	Exp. April-June 2010	Total Budget (USD)	Exp. April-June 2010
1. Personnel (Incl. staff and consultants)	200,000.00	6,050.00	300,000.00	53,723.00
2. Contracts (Incl. companies, professional services)	250,000.00	0.00	250,000.00	1,375.00
3. Training (incl. AV printing / production)	50,000.00	1,250.00	50,000.00	0.00
4. Transport (local)	20,000.00	2,391.98	30,000.00	1,620.01
5. Supplies and commodities (Incl. IT equipment and rental & maintenance)	50,000.00	2,400.00	40,000.00	2,161.58
6. Equipment (including installation)	2,000,000.00	0.00	2,800,000.00	0.00
7. Travel	50,000.00	0.00	40,000.00	2605.00
8. Miscellaneous	37,833.00	2,480.00	24,000.00	1,561.00
9. Agency Management Support (7%)	186,048.00	705.03	266,000.00	4413.19
TOTAL	2,834,880.00	20,942.00	3,800,000.00	67,458.78

III. Results: Progress per activities

Project Outputs	Activities	Progress to date	Targets for 2010
1. Project Management and Coordination	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"> Ongoing meetings with the project stakeholders Meetings with the newly elected municipal councils to present the project. Some delays in execution due to the municipal elections and consequent changes 	<ul style="list-style-type: none"> Strengthened coordination with project stakeholders
			<ul style="list-style-type: none"> Coordination with Municipality of Aarsal and Ras Baalback for phase II implementation
			<ul style="list-style-type: none"> Design of flood risk management structures for Phase II
			<ul style="list-style-type: none"> Procurement of sub-contractors for the implementation of Phase II
			<ul style="list-style-type: none"> Submission of quarterly progress reports
2. Flood Risk Management and Reduction	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"> Draft design of flood risk and erosion control structures completed; under review Watershed modeling report underway; continuous technical discussions on-going to finalise the report Review of existing literature and studies on flood Constant monitoring of flood events being undertaken by the project unit 	<ul style="list-style-type: none"> Design of flood risk management structures (Phase II)
			<ul style="list-style-type: none"> Initiation of excavations of flood water collection reservoirs (Phase II) Initiation of construction of FRM structures (Phase II)
			<ul style="list-style-type: none"> Development of a flood mgt plan for Ras Baalback (phase II)
			<ul style="list-style-type: none"> Determine the number and locations of stone walls for phase II.
3. Water Harvesting and Irrigation Networks	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"> Work in progress for the Deir El Ahmar Pond Changes in the design requested by the Deir El Ahmar COOP and municipality Re-design of the irrigation network to better suit local needs Delays due to need to secure rights of crossing through private lands Identification of reservoirs needing upgrading 	<ul style="list-style-type: none"> Establishment of an artificial irrigation lake in Deir Al-Ahmar (Phase I)
			<ul style="list-style-type: none"> Installation of irrigation networks for target beneficiaries (Phase I)
			<ul style="list-style-type: none"> Rehabilitation and completion of reservoir initiated by the Army in Barka (Phase I)

4. Land Cover Increase and Soil Erosion Reduction	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"> • Identification of suitable land areas for reforestation in Aarsal • Planting of seedlings completed in Aarsal • Identification of final land areas for planting in Ras Baalback 	<ul style="list-style-type: none"> • Forestation in Ras Baalback with wild fruit trees (Phase II)
			<ul style="list-style-type: none"> • Development of plan to increase green cover in Ras Baalback (Phase II)
5. Sustainability, capacity building and awareness raising	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"> • Training plan being prepared for Ras Baalback 	<ul style="list-style-type: none"> • Building the capacity of Municipality of Ras Baalback in flood management.

Implementation Constraints

- Municipal elections slowed down works on site
- Changes in the design in addition to terrain problems slowed the construction of the Deir el Ahmar pond
- Absence of weather data slowed down the design of the watershed flood model in Ras Baalback
- Based on the detailed flood damage calculations for the Flood II (Ras Baalback watershed), it was found the funds currently available to the project will be insufficient to cover the cost for management structures for the entire watershed. A cost-benefit analysis will be undertaken to select the best coverage given the financial constraints

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.

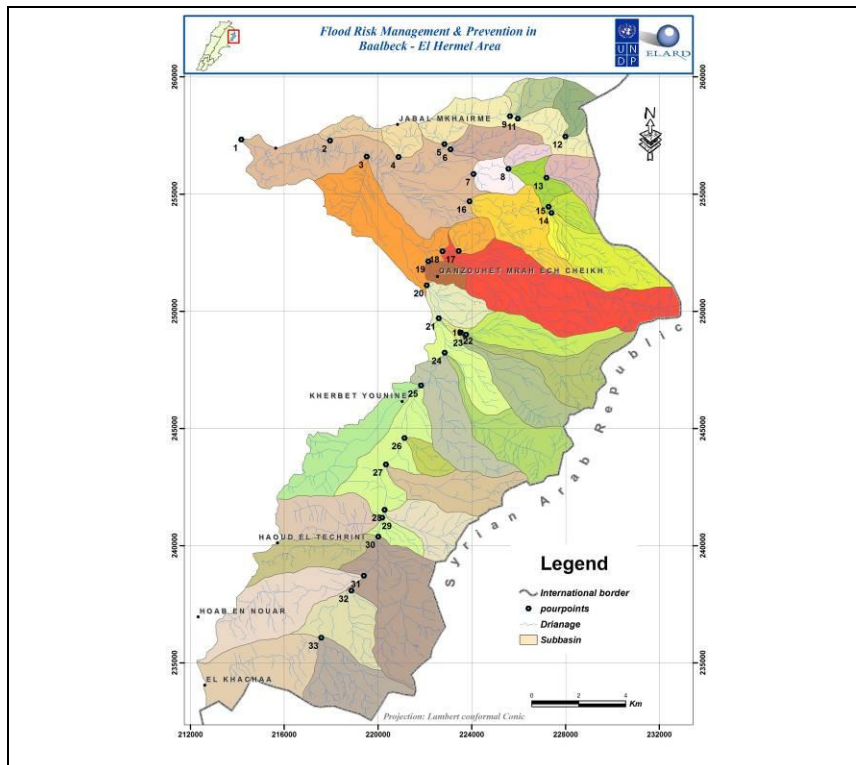
IV. Work plan per activity for the 3rd quarter in 2010 (July-Sep 2010).

Key Milestones Wks	Jul				Aug				Sep			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Project Management and Coordination												
1.1 Technical, Financial and operational mgt.												
1.2 Promotion of synergies with other projects												
1.3 Information exchange and coordination.												
2. Flood Risks Management and Reduction												
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.												
3. Irrigation Water Harvesting and Networking												
3.1 Construction of water harvesting pond in Deir el Ahmar												
4. Land Cover Increase & Soil Erosion Reduction												
4.1 Forestation and forage cultivation												
4.2 Identification of planting areas in Ras Baalback												
5. Sustainability, Capacity Building & Awareness Raising												
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												

Annex I Pictures and Maps (Phase I)

<p align="center">Training on Hydrology and Watershed Modelling</p>	<p align="center">Field visit to the Flood I reservoirs</p>
	
<p align="center">Excavation in Deir El Ahmar</p>	<p align="center">Pipes and manholes for the feeding channel</p>
	
<p align="center">Continuous site visits for inspection</p>	<p align="center">Pipe laying for feeding channel</p>
	
<p align="center">Counting of trees in Aarsal</p>	<p align="center">Trees planted in Aarsal</p>

Annex I Pictures and Maps (Phase II)



Sub watershed divisions for Phase II



Visits to watersheds and outlets in the Bekaa



Visits to watersheds and outlets in the Bekaa