

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: Two years Phase II: Three years
Reporting Period	:	1 January – 31 March 2009

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.

Expected Outcomes

- 1. Strengthened coordination and linkages with relevant on-going projects in the area.
- 2. Minimization of damages caused by the flash floods in the target area.
- **3.** Construction of reservoirs for harvesting unexploited water from springs, rainfall and snowmelts and thus extended availability of irrigation water.
- **4.** Higher income levels for target farmers through increased crop productivity and diversification of cropping systems.
- 5. Increased land cover and reduced risks of soil erosion.

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

	Phase I	Phase II
Total budget approved	USD 2,834,880	USD 3,800,000
Disbursements as for March 2009	USD 571,033	USD 0.00
Commitments for next quarter	USD 500,000	USD 60,000
Available Balance:	USD 2,281,130	USD 3,800,000

Phase I. Budget and Expenditure Breakdown per LRF Category:

CATEGORY	TOTAL BUDGET (USD)	TOTAL EXP (USD) to date
1. Personnel (Incl. staff and consultants)	200,000	126,200
2. Contracts (Incl. companies, professional services)	250,000	129,250
3. Training (incl. AV printing / production)	50,000	10,000
4. Transport (local)	20,000	3,903
5. Supplies and commodities (Incl. IT equipment and rental & maintenance)	50,000	15,958
6. Equipment (including installation)	2,000,000	239,500
7. Travel	50,000	2,500
8. Miscellaneous	37,833	8,436
9. Agency Management Support (7%)	186,048	35,286
TOTAL	2,834,880	571,033

Phase II. Budget and Expenditure Breakdown per LRF Category:

CATEGORY	TOTAL BUDGET (USD)	TOTAL EXP (USD) to date		
1. Personnel (Incl. staff and consultants)	300,000	-		
2. Contracts (Incl. companies, professional services)	250,000	-		
3. Training (incl. AV printing / production)	50,000	-		
4. Transport (local)	30,000	-		
5. Supplies and commodities (Incl. IT equipment and rental & maintenance)	40,000	-		
6. Equipment (including installation)	2,800,000	-		
7. Travel	40,000	-		
8. Miscellaneous	24,000	-		
9. Agency Management Support (7%)	266,000	-		
TOTAL	3,800,000	-		

III. Results

Project Outputs and progress per activities.

Project Outputs and Activities Project Outputs and Activities	Status						
 Project Management and Coordination Technical, financial and operational Management. Promote synergies with relevant on-going projects in target area. Exchange of information and coordination meetings. 	 A new UNDP project document was developed encompassing both phase of the flood project in accordance with the RBM approach. Document awaiting signature by CDR. Meetings were held with ACSAD to discuss the proposal for the second phase of the project and the target watershed area. Workplan for excavations developed in coordination with the Municipality of Aarsal and the Contractor The contractor will involve the local community in the field work and also making use of the available equipment in the village. Coordination with the HASAD/IFAD project on water harvesting issues in Bekaa. Coordination with the Swiss Development Agency and the National Council for Scientific Research on water harvesting ideas in Aarsal/Bekaa and submission of a concept note. 						
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	 The nine locations for establishing the water collection reservoirs and the specifications and designs of the reservoir were handed over to the contractor in February 2009. Excavations started for reservoir number 7 on March 5th in spite of the bad weather conditions. Excavations in two additional sites (No. 10 & 11) started end of March. (Annex II). All 185 locations for establishment of stone walls and check dams were handed over to the contracted company in the presence of representatives from the project and Municipality of Aarsal. Signed approvals from the respective land owners were obtained for most of the walls locations. Constructions of the walls are expected to start in April when weather conditions are more favorable. The preliminary target watershed for the second phase of the project was identified. The precise location and coordinates will be finalized after the needed hydrological data collection. The watershed has an area of around 220 m² and Ras-Baalback is the main affected village (Annex I.) 						

3. Irrigation Water Harvesting and Networking

- 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

Out of the pre-selected 5 potential sites for water harvesting, only one was suitable and met all criteria namely the one in Deir Al-Ahmar. Both proposed sites in Baalback as well as that of Fakhe were discarded because of the rocky nature of the land and the very high costs of the ponds relative to the low number of beneficiaries. The site in Chlifa was also not available after the municipality failed to secure the land for the site establishment. The project is now exploring 2-3 new sites in Zaboud, Makne and Chlifa. This may lead to some delay in the execution.

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

Nursery establishment: Germination of the planted wild fruit trees started in March for wild pears (90% emergence up to date) and almonds (40% up to date). The other planted species are expected to emerge in April (Annex 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

- Several awareness meetings were held with local farmers to explain the benefits of soil and moisture conservation that are expected to be achieved through the project's intervention.
- A rainfall meter was installed by the project in the Municipality of Aarsal, one person from the municipality was trained for rainfall measurement.
- An automated weather station was installed in the Municipality of Aarsal by LARI as well after consultation with the project.

Implementation Constraints

Land Ownership: Some farmers remain hesitant about the lease contract they signed with the municipality. If they change their minds and decide to reclaim their lands, the project will have to look for alternatives or make certain modifications in the volume capacity of the other reservoirs in order to compensate for lost volume.

Key Partnerships & Collaboration

A good partnership is established between the project and the municipality of Aarsal. Two members from the municipality are always present to assist the project in resolving any dispute or uncertainty coming from local farmers and land owners.

IV. Work plan per activity for second guarter in 2009 (April – June 2009).

Key Milestones	April				M	ay		June				
Wks	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 Field surveys & assessment of water resources												
3.2 Identification of water-harvesting sites.												
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5.2 Awareness raising on flood and water mgt.												
5.3 Capacity building through training.												
5.4 Alternative livelihoods												

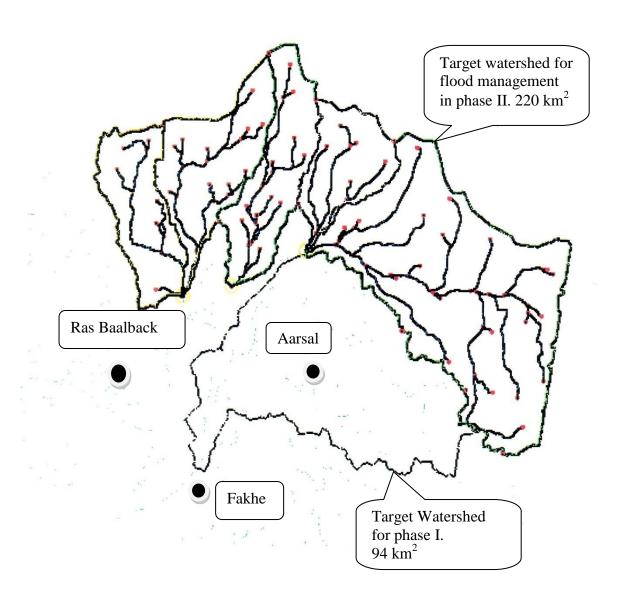
Adjustments to strategies, outcomes or outputs

With the approval of the Lebanon Recovery Fund of the Phase II of the Flood Project that targets the watershed of Ras-Baalback covering an area of approximately 220m2, a new UNDP Project Document was developed encompassing both phases of the project. Both phases of the Flood project comprise a larger programme on Flood Management in the Bekaa region. Accordingly, reporting to the LRF will include progress on both projects in the same reports. The new prodoc is in the process of being signed by the UN national partner, the CDR.

The total budget for both phases amounts to be \$6,634,880 covering a 4 year timeframe (2008 – 2011).

ANNEX I.

Diagram showing the two watersheds targeted by both phases of the project.



ANNEX II. Field Views

Excavations in Reservoir 7



Emergence of Wild pears



Nursery Overview

