

COUNCIL FOR DEVELOPMENT & RECONSTRUCTION
BEIRUT - LEBANON

No. : 6633/1

Beirut, 29/10/2009

Ms. Marta Ruedas
Resident Representative
United Nations
United Nations House
Beirut, Lebanon

Dear Ms. Ruedas,

We thank you for your letter referenced /71490/ of the 5th instant, pertaining to the "*Hydro Agricultural Development for Marjeyoun Area*" project and are pleased to attach the approved and signed minutes of the local project appraisal committee (LPAC) meeting held on the 27th of September 2009.


We also attach one signed copy of the project document for your files and have retained one for our records.

Looking forward to a fruitful cooperation on this project, we remain,

Sincerely yours,

Council for Development and Reconstruction



 Nabil A. El-Jisr
President



Enclosure

UNDP OFFICE - BEIRUT
FILE: 00057771 /71490
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INFO: ll
ACTION: ec

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MINUTES

Local Project Appraisal Committee Meeting **Hydro Agricultural Development for Marjeyoun Area**

Date: 27 September 2009

Time: 10am

Place: Litani River Authority, Bcharra El Khoury

Opening Remarks

Opening remarks were presented as follows:

- Salim Catafago, President of the Board of Directors, Litani River Authority: welcomed the participants and stressed the political and social importance of this project and the need of the Lebanese, particularly in South Lebanon, to make use of the water available in the country
- Ali Abboud, Director General, Litani River Authority: gave an overview of the project objectives; being a pilot project, it will hopefully be replicated to the remaining regions of the South and Lebanon as a whole.
- Edgard Chehab, Programme Manager/Assistant Resident Representative, UNDP: elaborated on the importance of this partnership between the government, LRA, NGOs and all actors in the water sector. Introduced the project as the first UNDP project on the thematic area of water that simultaneously works on socio-economic development of local communities.

Presentation

The overall objectives and management structure of the project was presented, including the project budget and activities; risks and issues of concern.

Discussions

- **Land ownership:** the Head of Municipality of Blat and others raised concern regarding the issue of land ownership in this area, especially related to the lands that will be covered by Canal 800. The Director General of the LRA clarified that the land ownership issue relates to the Canal 800 project and not this one. The current project is not expected to deal with any land expropriation or ownership issues.
- **Links to Canal 800:** coordination is definitely needed between the Canal 800 project and this one; UNDP and the project partners confirmed that coordination will be maintained throughout implementation. The CDR clarified that the outputs of this project should not depend on the completion of Phase II of the Canal 800 project and that should it not be finished on time, other sources of water need to be found for irrigation in the region. UNDP explained that this project is "anticipatory" in nature and that it will prepare the designs and needed groundwork for Canal 800 project. Furthermore, all the project outputs of this project can be used separately to mobilise

resources for implementation. The CDR requested the LRA to use its own resources for the technical studies needed for the irrigation networks.

- **Pollution:** concern was raised regarding the high pollution load being pumped into the Litani River. The need to build waste water treatment plants was raised however, it was clarified that this is beyond the objectives of this project.
- **Environment:** the Ministry of Environment inquired whether an environmental impact assessment (EIA) will be undertaken for this project. It was clarified that an EIA will take place should land reclamation works require so; however, this is unlikely since the implementation of irrigation networks and large scale engineering works will not take place within the scope of this project.
- **Livelihood component:** Heads of municipalities, Friends of Ibrahim Abdel Al, as well as the Advisor to the Prime Minister present in the meeting stressed the importance of the livelihood component of the project. The main target and objective of this project is to improve the living conditions of local farmers working in the agricultural sector in this area through the identification of adequate crops for the land; identifying local water needs and building their capacity in water management. This project will set the stage as a pilot to undertake all the environment, agricultural and socio-economic studies in the region.
- **Local community:** enthusiasm and interest was shown by the stakeholders present, including representatives of the 5 local communities. It was noted the issue of domestic water use versus agricultural water use should be taken into consideration while undertaking the studies and it was highlighted that irrigation needs can be met using existing water wells. This issue will be further elaborated during project implementation.

Discussions

- Proceed with signature of the project document and annual work plan;
- Recruitment of project manager as per the terms of reference detailed in the project document.

Approval of Minutes



Signed on behalf of the Government
Council for Development and
Reconstruction



Signed on behalf of UNDP
Marta Ruedas

Resident Representative

Date:

05 October 2009

In attendance

1	Mr.	Michel	Afram	Director General	LARI
2	Mr.	Ali	Abboud	Director General	Litani River Authority
3	Mr.	Kamal	Karaa	Head of Rural Development Department	Litani River Authority
4	Mr.	Ali	Nasserdine	Engineer	Litani River Authority
5	Mr.	Geryes	Al Ammourri	Civil Engineer	Litani River Authority
6	Mr.	Imad	Terro	Civil Engineer	Litani River Authority
7	Mr.	Elias	Hawi	Head of Water Resources	Litani River Authority
8	Mr.	Nabil	Amasha	Environment Unit	Litani River Authority
9	Mr.	Elie	Al Rayess	Electrical Engineer	Litani River Authority
10	Ms.	Josiane	Khalife	Assistant Director General	AVSI
11	Mr.	Raghd	Assi	Programme Manager	UNDP
12	Mr.	Charbel	Rizk	Project Manager	UNDP
13	Mr.	Massimiliano	Poli	Head of Mission	Africa 70
14	Mr.	George	Akl	Engineer	Ministry of Environment
15	Ms.	Costanzad	Robilant	Project Coordinator	Africa 70
16	Mr.	Andrea	Garavini	Economist	Italian Cooperation
17	Mr.	Adib	Geadah	Head of Unit	CDR
18	Mr.	Ali	Kassem	Head of Unit	Litani River Authority
19	Mr.	Michel	Yammine	Head of Unit	Litani River Authority
20	Mr.	Jamil	Ramadan	Head of Municipality	Blat - South Lebanon
21	Mr.	Nasser	Nasrallah	Ex Director General and ex Parliement Deputy	Litani River Authority
22	Mr.	Jean	Boulous	Acting Director Geenral - Investement	Ministry of Energy and Water
23	Mr.	Mahmoud	Haydar	Engineer	Ministry of Energy and Water
24	Mr.	Hassan	Daher	Head of Municipality	Dibbine - South Lebanon

25	Ms.	Gloria	Abi Zeid	President	Green Plan
26	Ms.	Barabara	Tomassini	Project Coordinator	Global Water Programme
27	Ms.	Zeina	Majdalani	Engineer	Prime Minister's Office
28	Mr.	Wissam	Zahabi		Prime Minister's Office
29	Ms.	Hiba	Younis	Agricultural Engineer	Litani River Authority
30	Ms.	Imane	Abdel AI	President	Association of Friends of Ibrahim Abdel AI
31	Mr.	Ghassan	Gebran	Head of Unit	Litani River Authority
32	Mr.	Fadi	Karam	Researcher	Litani River Authority
33	Mr.	Salim	Catafago	President of Board of Directors	Litani River Authority
34	Mr.	Ziad	El Zein	PR Coordinator	LCEC
35	Mr.	Ghassan	Taher	Advisor Prime Ministry's Office	Prime Minister's Office
36	Ms.	Wafa	Charafeddine		CDR
37	Mr.	Edgard	Chehab	Assistant Resident Representative	UNDP
38	Ms.	Jihane	Seoud	E&E UNDP Program	UNDP
39	Me.	Malek	Rached	ممثل قائم مقام مرجعيون	قائم مقامية مرجعيون و بلدية جديدة مرجعيون
40	Mr.	Bilal	Alaouyye	Designer - GIS	Litani River Authority



United Nations Development Programme
Country: Lebanon
PROJECT DOCUMENT

Project Title: Hydro Agricultural Development for Marjeyoun Area

UNDAF Outcome(s): 2. Rights-based approach to development promoted and implemented 2.3 to improve efficiency in resource allocation and administration for human development

Expected Output(s): Enable activation of energy efficiency and renewable energy applications in Lebanon

Executing Entity: UNDP Lebanon Country Office (DEX)

Implementing Agencies: UNDP Lebanon Country Office (DEX)

Brief Description

The project will assist local communities in Marjeyoun area to benefit from a main canal supplying water to South Lebanon from West Bekaa. The project will show the advantages and efficiency of modern irrigation techniques, will propose the new cropping patterns in the region, and will support the establishment of a very much needed Water User Association. The project will have a direct impact on the livelihood of at least 1,250 households within 5 communities affected by the July 2006 conflict through extending the areas suitable for agriculture, and will provide direct assistance to the farmers in the area. The project will support the establishment of Water Users Association for proper management of water use, will produce topo-cadastral maps which are the bases for designing the irrigation distribution networks, will establish a land classification database as a prerequisite for the development of the hydrant implementation plans, and will execute land reclamation for an area of 522 ha setting up the infrastructure for the water distribution network.

Programme Period:	2009-2013
Atlas Award ID:	00057771
Atlas Project ID:	00071490
Start date:	October 2009
End Date:	October 2011
PAC meeting:	27 September 2009
Management Arrangements:	DEX

Total resources required	2,200,000 USD
Total allocated resources:	2,000,000 USD
Regular	
Other:	
LRF	2,000,000 USD
UNDP F&A (7%)	140,000 USD
In-kind Contributions	200,000 USD

Agreed by CDR



Agreed by UNDP

I. SITUATION ANALYSIS

1. During the seventies, the Litani River Authority (LRA) executed the planning and design of the "Hydro Agricultural Development Project of South Lebanon" in collaboration with UNDP and FAO. An output of this project was "Canal 800" which is a series of distribution networks designed to provide water for irrigation from "Qaroun" Dam in West Bekaa to an area of about 15,000 ha South of Litani River in South Lebanon (Quelia and Marjeyoun areas). The length of the canal is 52 km starting from "Markaba" Plant in West Bekaa and dragging water in the amount of 90 million cubic meters per year to twenty main reservoirs distributed in 12 irrigation perimeters South of Litani River. The target area is divided into 12 irrigation zones distributed across the Cazas of Marjaayoun (two zones covering 2,569 hectares), Nabatiyeh (one zone covering 1,570 hectares), and South Qassmieh (nine zones covering 10,916 hectares). Canal 800 is designed to supply irrigation water at the rate of 6,600-7,000 m³ per hectare per season
2. In 2002, after a reviewed and updated design and feasibility study of Canal 800 project, the Lebanese Government decided to execute the main Canal only. A loan agreement was signed with the Arab fund and Kuwait Fund for Development. The needed legislation was approved by the Lebanese Parliament in 2002. The execution of the main canal is expected to start shortly and to be completed within three years period (end of 2011).
3. To date, the Lebanese Government has only received funding and initiated the execution of works for the main Canal without the irrigation networks that spread over 12 areas South of the Litani. To ensure that much needed irrigation water is received by local communities in at least one of the regions, namely the Caza of Marjeyoun, this pilot project will prepare the infrastructure and facilitate the implementation of the irrigation distribution network in the "Marjeyoun" North Perimeter. The project will also work at the community level using a participatory approach involving the farmers to ensure proper management of water use.

II. STRATEGY

4. This project will be a model for the other areas which will benefit from Canal 800. It will set the infrastructure for the distribution network, will show the advantages and efficiency of modern irrigation techniques, will propose the new cropping patterns in the region with their socio-economic impact, and will support the establishment of a very much needed Water User Association. The project will have a direct impact on the livelihood of the local communities affected by the July 2006 conflict through extending the areas suitable for agriculture and will provide direct assistance to the farmers through providing them with wheat seeds to be cultivated on their lands for two consecutive years (other field crops will be considered as well), awaiting the supply of irrigation water from the main canal.
5. This pilot project covers the "Marjeyoun" North Perimeter with an area of implementation covering 522 ha benefiting around 1,250 farmers within the following 5 communities: "Burghos", "Blat", "Dibbine", "Ibl Essaki", and "Jdaydit Marjeyoun".
6. The project's national partner is the Litani River Authority (LRA), an autonomous public establishment which is under the tutelage of the Ministry of Energy and Water. The LRA's covers a larger scope than just the Litani River, it includes the execution of works for irrigation, studies and construction of dams and hydroelectric power plants and the management of both surface and ground water resources. Amongst its responsibilities is the implementation of irrigation schemes in South Bekaa and South Lebanon (law 221 -Water Authorities Law).
7. The project was developed in close technical coordination with the Association of the Friends of Ibrahim Abd El Al (AFIAL). The Association works on awareness and advocacy on water issues for both decision makers and the general public. It has successfully implemented several water projects and continues to raise funds and lobby for the promotion of integrated water resource management at the national level.
8. This project falls within the management of UNDP's Energy and Environment Programme, under the water management thematic area. The programme aims at providing support in the formulation and implementation of national projects devised to enhance this sector. The strategy of the programme focuses on promoting much needed water resource management that includes environmental consideration while meeting the development needs of local communities.
9. The project is in line with the Millennium Development Goals, namely Goal 7 – Ensure Environmental Sustainability. It works towards the target of proportioning total water resources used in each country. It further meets national priorities on water resource management of the Ministry of Energy and Water and is in line with the water reform programme set by the Lebanese Government.

III. RESULTS AND RESOURCES FRAMEWORK

The project will assist five local communities in Marjeyoun area to benefit from a main canal supplying water to South Lebanon from West Bekaa through extending the areas suitable for agriculture, and providing direct assistance to the farmers in the area.

There are four main activities within the project that will run in parallel to ultimately achieve the overall objective of developing hydro-agricultural infrastructure for 5 communities South of Litani River. Below is a brief on the activities that will be undertaken:

- **Activity 1: Water User Association (WUA) established**

The establishment of Water User Associations (WUA) is a necessity for the good management and implementation of irrigation projects. The establishment of this association will be based on a participatory approach and include local farmers and community members, and include an assessment of local needs. Whenever possible, linkages will be established with on-going working group structures such as the ART-GOLD programme. The set-up of the WUA will be determined based on water needs at the local level, ensuring equitable access to and management of irrigation water will be drawn from Canal 800 through the irrigation networks. The mandate of the WUA is to be able to find solution for shifting expropriation problem at parcel level for access right and water future management. This approach will be a pilot aimed at promoting best-practice for the 11 remaining irrigation zones targeted by Canal 800.

Local and international experts will collaborate to prepare the needed draft laws and decrees to legally set-up WUA. Lobbying efforts have to be undertaken to disseminate the concept and pass the concerned laws. The Association of friends of Ibrahim Abdelaal (AFIAL), one of the project's main partners, will be subcontracted to accomplish this output given its mandate and strength in water policy.

- **Activity 2: Topo-cadastral maps, land classification database and hydrant plans produced**

The topo-cadastral maps are the bases for designing the irrigation distribution networks. There are regions in South Lebanon Region with no cadastral delineation, others with temporary delineation and few with final delineation. These plans must be produced for the target area on a unified scale of 1/2,000 in coordination with the Directorate of Geographic Affairs of the Lebanese Army. The total concerned area is about 745 ha. This will be a first step in the implementation of the project and will include

- Processing of maps based on stereoscopy proceeding in case good quality aerial photos are available;
- Using scanned maps for adjustments based on available topographic map; and
- Using GIS whenever good quality aerial photos are not available as well as satellite images with field work for verification whenever above info are lacking

Land classification is the next step in the development of the hydrant plan. Any available land classification at the national level should be collected and consolidated. The total concerned area is about 745 ha. Classification parameters to include: geology, terrain slope, soil description, in-depth percentage of stones and gravel, percentage and nature of rocks, surface percentage of stones and gravels, and the actual current land use. Inspection pits are required every 0.4 ha to briefly describe soil profile. From soil description parameters, a soil series classification has to be done. This series classification must be supported by:

- Physical laboratory analysis, every 4 ha (Coarse sand, fine sand, silt and clay)
- Chemical parameters analysis, every 40 ha (Nitrogen, potassium, phosphate, total and active calcareous, magnesium, iron, bore and manganese)
- In field measure of infiltration rate by double ring technique, every 4 ha.

The major step in delineating the distribution network is the Hydrant Implementation Plan (HIP). This plan must be done in full collaboration with farmers. Parcel tenure in South Lebanon is very small (average is less than 0.3 ha) and pressure on water demand is very high. Traditional concepts of large distribution networks have encountered some problems which are mainly related to misusing of the network by the farmers (overdose, uneven distribution, etc.).

The pre-programming hydrants (such as "Aquacard"), is a new generation of Hydrants which can resolve management problems related to traditional hydrants including the problem of water shortage during dry years. Also it resolves the problem through fees which will be collected by pre-paid card used for programming irrigation schedule and quantities.

Steps to elaborate the design of Hydrants plan are:

- Cropping pattern: based on data collected through output 3, which give the properties of soils series and actual land use, a future cropping pattern can be developed.
- Water needs: based on the cropping pattern, water needs can be estimated at the on-farm level. Taking into account the efficiency on-farm and in the network, the global needs can be calculated. Based on water needs, designer can establish the hydrant plan norms regarding relationship between area and flow.
- Hydrants plan design: Designed in office, the plan must take into consideration the necessity to assure an easy access for every user. This plan must be verified at farms level in close collaboration with farmers and WUA to solve the problem of accessibility.

▪ **Activity 3: Land reclamation work executed**

This area was deeply affected by the war of July 2006. Assistance to the farmers is necessary to avoid socio economical problems. Since South Lebanon region is hilly and need land reclamation works, land reclamation will not only set the infrastructure to benefit from the execution of the main canal of the Canal 800 project, but will also provide the farmers with land readily available for field crops cultivation. Along the execution of the land reclamation work, the project will provide the farmers with wheat seeds (and other field crops will be considered) to be cultivated on their lands for two consecutive years awaiting the execution of the tertiary irrigation network.

The implementation of land reclamation will require base works (deep plowing, rocks removal and terraces construction) and complementary works (terraces walls construction, stone and pebble removal). The base works are expensive to be charged on the land owners. It needs engineering concept and heavy machinery and will be fully supported by the project.

Land reclamation area is estimated at 522 ha. The activities to be undertaken include

- Propose guideline basis for land reclamation works
- Based on parcels description, prepare land reclamation designs for uniform geographical region
- Execution of the base work by the project.
- Support complementary works (Terraces walls, stone and gravel removal) to be done by farmers
- Provide the farmers with wheat seeds (other field crops will be considered as well) for cultivating their land, awaiting the execution of the irrigation network

▪ **Activity 4: Project management**

For the day-to-day management of the project, the UNDP CO will set-up a Project Management Unit (PMU) within the Litani River Authority (in-kind contribution from LRA). The PMU will work under the direct supervision of the Environment and Energy Programme of the UNDP CO, and in close collaboration with the Litani River Authority. The PMU will be responsible for the overall execution of the project and will be led by a full time national Project Manager and supported by the required local professional and administrative staff. A

National Coordinator will be assigned by the Litani River Authority and will act as the focal point of the project with the Authority.

Applicable Key Result Area (from 2009-12 Strategic Plan): 3.1 Frameworks and Strategies for Sustainable Development

Partnership Strategy: Litani River Authority, Ministry of Energy and Water; Council for Development and Reconstruction

Project title and ID (ATLAS Award ID):

INTENDED OUTPUTS	OUTPUT TARGETS FOR YEAR 1	OUTPUT TARGETS FOR YEAR 2	INDICATIVE ACTIVITIES	RESPONSIBLE PARTIES	INPUTS (without F&A)
<p>Developing hydro-agricultural infrastructure work for 5 communities South of the Litani River</p> <p>Baseline: hydro-agricultural network does not exist along the proposed Canal 800</p> <p>Indicators:</p> <ul style="list-style-type: none"> - Establishment of the WUA in the region - High resolution topo-cadastral maps established, land classification database and hydrant plans produced for the region - Land reclamation works executed for 522 ha 	<p>At least 5 national workshops conducted</p> <p>Draft legislation</p> <p>Collect and process available topo-cadastral maps</p> <p>Obtain satellite images</p> <p>30% of soil analysis and field measurements of infiltration conducted</p> <p>Land reclamation designs completed</p>	<p>WUA established</p> <p>Topo-cadastral maps produced</p> <p>Land surveys including soil analysis and field measurements completed</p> <p>Cropping pattern and water needs delineated at the farm level</p> <p>Hydrant plans designed</p> <p>Land reclamation work completed (522 ha)</p> <p>Farmers provided with seeds</p>	<p>1. Establishment of Water User Association (WUA)</p> <ul style="list-style-type: none"> - Conduct national workshops to discuss the concept - Draft the required legislation to establish the WUA - Lobby with policy makers to pass the required legislation <p>2. Development of land database and hydrant plans</p> <ul style="list-style-type: none"> - Processing of topo-cadastral maps, using GIS whenever good quality aerial photos are not available (including field verification) - Land surveys: obtain data on the geology, slopes, percentage and nature of rocks, stones and gravel on surface, and current land use for the project area - Conduct physical and chemical laboratory analysis for soil and infiltration measurements (every 4 ha) - Determine cropping pattern and water needs at farm level - Finalise the hydrant plans <p>3. Execution of land reclamation works</p> <ul style="list-style-type: none"> - Develop guideline basis for land reclamation works - Prepare land reclamation designs for uniform geographical region - Execution of the base work. - Support complementary works (Terraces walls, stone and gravel removal) to be done by farmers - Provide the farmers with wheat seeds for cultivating their land <p>4. Project Management</p> <ul style="list-style-type: none"> - Establish PMU - Establish coordination and linkages between all project partners - Ensure timely implementation and reporting on project activities - Ensure proper financial disbursement of project funds 	<p>UNDP & Abdel Aal Association</p> <p>UNDP & LRA</p> <p>UNDP & LRA</p> <p>UNDP & LRA</p> <p>UNDP</p>	<p>120,000 USD</p> <p>227,805 USD</p> <p>1,383,786 USD</p> <p>260,000 USD</p>



Annual Work Plan

Lebanon - Beirut

Award Id: 00057771 Report Date: 1/10/2009
 Award Title: Hydro Agricultural Development for Marjeyoun Area
 Year: 2009

Project ID	Expected Outputs	Key Activities	Timeframe		Responsible Party	Planned Budget				
			Start	End		Fund	Donor	Budget Descr	Amount US\$	
00071490	Hydro Agricultural Development	Dev of land database & HIP			UNDP	30000	LRF	72100	Contractual Services-Companie	31,000.00
					UNDP	30000	LRF	75100	Facilities & Administration	2,170.00
		Project Management			UNDP	30000	LRF	71400	Contractual Services - Individ	18,000.00
					UNDP	30000	LRF	71600	Travel	2,000.00
					UNDP	30000	LRF	72200	Equipment and Furniture	20,000.00
		Water User Association			UNDP	30000	LRF	72800	Information Technology Equipm	5,000.00
					UNDP	30000	LRF	74500	Miscellaneous Expenses	1,000.00
					UNDP	30000	LRF	75100	Facilities & Administration	3,220.00
					UNDP	30000	LRF	72100	Contractual Services-Companie	20,000.00
					UNDP	30000	LRF	75100	Facilities & Administration	1,400.00
TOTAL										
GRAND TOTAL										
103,790.00										
103,790.00										



Annual Work Plan

Lebanon - Beirut

Award Id: 00057771 Report Date: 1/10/2009
 Award Title: Hydro Agricultural Development for Marjeyoun Area
 Year: 2010

Project ID	Expected Outputs	Key Activities	Timeframe		Responsible Party	Planned Budget				
			Start	End		Fund	Donor	Budget Descr	Amount US\$	
00071490	Hydro Agricultural Development	Dev of land database & HIP			UNDP	30000	LRF	71200	International Consultants	5,000.00
						30000	LRF	71300	Local Consultants	4,000.00
						30000	LRF	71600	Travel	4,000.00
						30000	LRF	72100	Contractual Services-Company	46,401.00
						30000	LRF	75100	Facilities & Administration	4,158.00
			Land Reclamation Works			30000	LRF	71400	Contractual Services - Individ	30,000.00
					30000	LRF	71600	Travel	4,500.00	
					30000	LRF	72100	Contractual Services-Company	500,000.00	
			Project Management			30000	LRF	75100	Facilities & Administration	37,415.00
					30000	LRF	71400	Contractual Services - Individ	70,000.00	
					30000	LRF	71600	Travel	5,000.00	
					30000	LRF	72200	Equipment and Furniture	10,000.00	
			Water User Association			30000	LRF	72800	Information Technology Equipm	5,000.00
					30000	LRF	74500	Miscellaneous Expenses	10,000.00	
					30000	LRF	75100	Facilities & Administration	7,000.00	
TOTAL						30000	LRF	72100	Contractual Services-Company	50,000.00
GRAND TOTAL						30000	LRF	75100	Facilities & Administration	3,500.00
										795,974.00
										795,974.00



Annual Work Plan

Lebanon - Beirut

Award Id: 00057771

Award Title: Hydro Agricultural Development for Marjeyoun Area

Year: 2011

Report Date: 1/10/2009

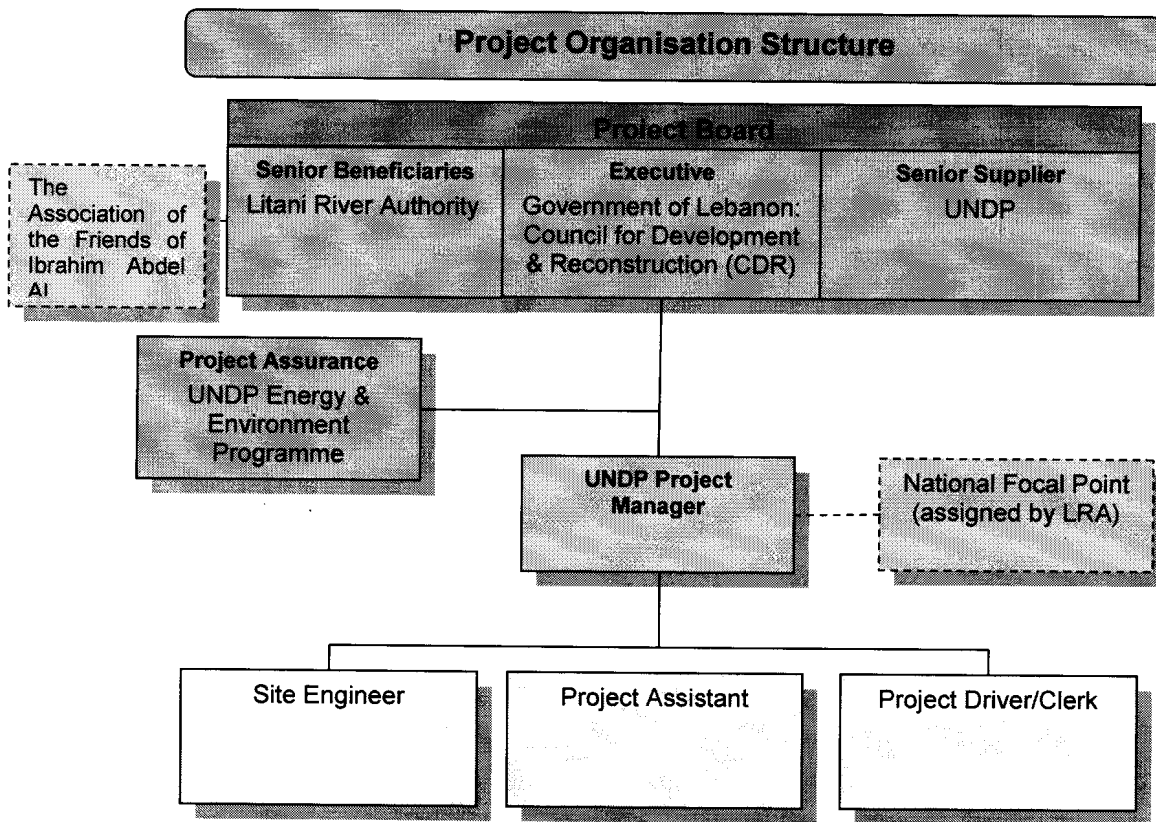
Project ID	Expected Outputs	Key Activities	Timeframe		Responsible Party	Planned Budget				
			Start	End		Fund	Donor	Budget Descr	Amount US\$	
00071490	Hydro Agricultural Development	Dev of land database & H/P			UNDP	30000	LRF	71200	International Consultants	10,000.00
					UNDP	30000	LRF	71300	Local Consultants	9,000.00
					UNDP	30000	LRF	71600	Travel	3,500.00
				UNDP	30000	LRF	72100	Contractual Services-Companie	100,000.00	
				UNDP	30000	LRF	75100	Facilities & Administration	8,575.00	
				UNDP	30000	LRF	71400	Contractual Services - Individ	10,000.00	
				UNDP	30000	LRF	71600	Travel	3,000.00	
				UNDP	30000	LRF	72100	Contractual Services-Companie	649,558.00	
				UNDP	30000	LRF	72300	Materials & Goods	96,200.00	
				UNDP	30000	LRF	75100	Facilities & Administration	53,113.00	
				UNDP	30000	LRF	71400	Contractual Services - Individ	80,000.00	
				UNDP	30000	LRF	71600	Travel	8,000.00	
				UNDP	30000	LRF	74500	Miscellaneous Expenses	9,000.00	
				UNDP	30000	LRF	75100	Facilities & Administration	6,790.00	
				UNDP	30000	LRF	72100	Contractual Services-Companie	50,000.00	
		UNDP	30000	LRF	75100	Facilities & Administration	3,500.00			
TOTAL										1,100,236.00
GRAND TOTAL										1,100,236.00

TRANSLATION OF LRF BUDGET TO UNDP BUDGET

CATEGORY	ITEM	TOTAL UNIT COST (USD)	NUMBER OF UNITS	UNDP Activity	UNDP Budget Account	New Amount
1. Personnel Incl. staff and consultants	Project Manager	72,000	1	A4	71400	108,000
	Administrative assistant	19,200	1	A4	71400	38,400
	Driver	12,000	1	A4	71400	19,200
	Site Engineer	40,000	1	A3	71400	40,000
	Irrigation Expert	15,000	1	A2	71300	5,000
	GIS Expert	24,000	1	A4	71400	10,000
				A2	71300	4,000
				A4	71400	8,000
				A4	71400	12,000
		Irrigation expert (international)	50,000	1	A2	71200
	Sub-total	232,200		A4	71400	35,000
2. Contracts Incl. companies, professional services, grants	Water User Association Legal and technical studies	60,000		A1	72100	60,000
	Production of topo-cadastral maps	75,000		A2	72100	75,000
	Design of hydrant plans	20,700		A2	72100	20,700
	Land classification database	81,701		A2	72100	81,701
	Execution of land reclamation (522 ha)	1,179,558		A3	72100	1,149,558
	Sub-total	1,416,959		A1	72100	30,000
	3. Training/Workshops	30,000		A1	72100	30,000
	4. Transport (local)	15,000		A3/A2	71600	15,000
	5. Supplies and commodities	100,000		A3	72300	100,000
	6. Equipment (including installation)	20,000	2	A4	72200	30,000
Sub-total	40,000		A4	72800	10,000	
7. Travel	15,000		A4	71600	15,000	
8. Miscellaneous	20,000		A4	74500	20,000	
9. Agency Management Support* (7%)	130,841		A1/A2/A3/A4	75100	130,841	
TOTAL	2,000,000					

V. MANAGEMENT ARRANGEMENTS

1. The Project will be executed under the UNDP Direct Execution modality (DEX), whereby UNDP will act as both the implementing and the executing agency.
2. For the day-to-day management of the project, the UNDP CO will set-up a Project Management Unit (PMU) within the Litani River Authority (in-kind contribution from LRA). The PMU will work under the direct supervision of the Environment and Energy Programme of the UNDP CO, and in close collaboration with the Litani River Authority. Furthermore, the PMU will coordinate with the Lebanese Government particularly the Ministry of Agriculture, Green Plan and CDR, the local beneficiaries, as well as with the national and international team of experts recruited for this project. The PMU will be responsible for the overall execution of the project and will be led by a full time national Project Manager and supported by the required local professional and administrative staff. A National Coordinator will be assigned by the Litani River Authority and will act as the focal point of the project with the LRA. The Terms of Reference of the PMU personnel are listed in Annex 1.
3. The Association of Friends of Ibrahim Abdelaal (AFIAL), a leading Lebanese NGO in water use and irrigation is a technical partner of the project given their involvement in the development of the project concept and expertise in the area of water management, particularly related to the Litani River Authority. The AFIAL will be responsible for the implementation of the output related to the establishment of Water User Association and will have an overall advisory role at the project board level.
4. The UNDP CO will monitor the progress towards intended results, and will ensure high-quality managerial and financial implementation of the project, and will be responsible for monitoring and ensuring proper use of administrated funds to the assigned activities, timely reporting of implementation progress as well as undertaking of mandatory and non-mandatory evaluations. Furthermore, the procurement of goods and services and the recruitment of personnel shall be provided in accordance with UNDP guidelines, procedures and regulations.
5. In order to ensure optimum involvement of the project partners a Project Board will be established. It will include senior representations of the Litani River Authority, Association of Friends of Ibrahim Abdelaal (AFIAL), CDR and UNDP. The board will be responsible for the overall progress monitoring and guidance of the project as well as the approval of the annual workplan.
6. In accordance with the decisions and directives of UNDP's Executive Board reflected in its Policy on Cost Recovery from Other Resources, the Contribution shall be subject to cost recovery by UNDP for two distinct cost categories related to the provision of support services, namely UNDP **General Management Support** recovered with a **flat rate of 7 %** and includes the following services:
 - Project identification, formulation, and appraisal
 - Determination of execution modality and local capacity assessment
 - Briefing and de-briefing of project staff and consultants
 - General oversight and monitoring, including participation in project reviews
 - Receipt, allocation and reporting to the donor of financial resources
 - Thematic and technical backstopping through Bureaus
 - Systems, IT infrastructure, branding, knowledge transfer
7. UNDP Direct costs incurred for Implementation Support Services (ISS), recovered through the Universal Price List, as long as they are unequivocally linked to the specific project, these costs are built into the project budget against a relevant budget line and, in the case of clearly identifiable transactional services, charged to the project according to standard service rates. ISS include the following services:
 - Payments, disbursements and other financial transactions
 - Recruitment of staff, project personnel, and consultants
 - Procurement of services and equipment
 - Organization of training activities, conferences, and workshops, including fellowships
 - Travel authorization, visa requests, ticketing, and travel arrangements
 - Shipment, custom clearance, vehicle registration, and accreditation
8. The audit of DEX projects is made through the regular external (UN Board of Auditors) or internal audits (audits managed by UNDP's Office of Audit and Performance Review).



VI. MONITORING FRAMEWORK AND EVALUATION

9. UNDP CO will undertake periodic monitoring of the implementation progress through regular meetings with the project team. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion and to ensure smooth implementation of project activities. Furthermore, UNDP CO will be responsible for financial monitoring and reporting on all disbursements of the programme, and will ensure continued reporting to the Government of Lebanon and the Donor Country through the Lebanon Recovery Fund.
10. Monitoring will be a continuous and systematic process review of the various activities and will be intended to (i) measure input, output, and performance indicators; (ii) provide regular and up-to-date information on the progress towards meeting the overall Project Objectives; (iii) and alert the implementing partners with problems in implementation, and provide basis on which performance may be improved, and (iv) determine whether the relevant stakeholders are responding as expected.
11. The regular reporting from the Project is governed by UNDP reporting requirements, and will include the following reports:
 - i. Quarterly progress reports as per LRF format. These will reflect progress on works, goods procured, technical assistance, performance indicators and financial reports;
 - ii. Annual Tripartite Project Review (TPR) meeting in the presence of project donors, national counterparts and all concerned stakeholders.
 - iii. Final Project Evaluation Report carried out by an independent external consultant
12. Furthermore, a number of timely milestone review events will be undertaken in the presence of project donors, national counterparts and all concerned stakeholders and beneficiaries. These events will include: i) a Project Inception workshop, ii) an Annual Tripartite Project Review (TPR) meeting, and iii) a Terminal Project workshop.

i. Quality Management for Project Activity Results

Below is a preliminary Quality Management table for the project.

Outcome: Hydro agricultural infrastructure developed for 5 communities South of Litani River		
Activity Result 1	Water User Association (WUA) established	Start Date: September 2009 End Date: May 2011
Purpose	WUA is a necessity for an equitable management and implementation of irrigation projects.	
Description	<ul style="list-style-type: none"> - Conduct national workshops to discuss and agree upon the concept - Draft the required legislation - Lobby with policy makers to pass the required legislation 	
Quality Criteria	Quality Method	Date of Assessment
-Proper legislation drafted -WUA formed	-Progress reports -Final Report	-End of each quarter and upon submission of progress reports -End of project upon submission of Final Report
Activity Result 2	Topo-cadastral maps, land classification database and hydrant plans produced	Start Date: October 2009 End Date: December 2010
Purpose	The topo-cadastral maps are the bases for designing the irrigation distribution networks. Land classification is important for the development of the hydrant plan. The hydrant plans are needed for designing the distribution network	
Description	<ul style="list-style-type: none"> - Processing of topo-cadastral maps, using GIS whenever good quality aerial photos are not available (including field verification) - Conduct physical and chemical laboratory analysis for soil and infiltration measurements (every 4 ha) - Obtain data on the geology, slopes, percentage and nature of rocks, stones and gravel on surface, and current land use for the project area - Determine cropping pattern and water needs at farm level - Finalise the hydrant plans 	
Quality Criteria	Quality Method	Date of Assessment
-Qualified consultants recruited -Quality reports/studies produced	-Progress reports -Technical reports	End of each quarter and upon submission of technical and progress reports
Activity Result 3	Land reclamation work executed	Start Date: January 2010 End Date: February 2011
Purpose	This area was deeply affected by the war of July 2006. Assistance to the farmers is necessary to avoid socio economical problems. Since South Lebanon region is hilly and need land reclamation works, land reclamation will not only set the infrastructure to benefit from the execution of the main canal of the Canal 800 project, but will also provide the farmers with land readily available for field crops cultivation. Along the execution of the land reclamation work, the project will provide the farmers with wheat seeds (and other field crops will be considered) to be cultivated on their lands for two consecutive years awaiting the execution of the tertiary irrigation network.	
Description	<ul style="list-style-type: none"> - Propose guideline basis for land reclamation works - Based on parcels description, prepare land reclamation designs for uniform geographical region - Execution of the base work by the project. - Support complementary works (Terraces walls, stone and gravel removal) to be done by farmers <p>Provide the farmers with wheat seeds(other field crops will be considered as well) for cultivating their land, awaiting the execution of the irrigation network</p>	
Quality Criteria	Quality Method	Date of Assessment
- Request for proposals launched and	-Progress reports	End of each quarter and upon

contract issued with qualified company - Base work properly executed over the target 522 ha	-Field inspections and site reports - reports from contractors	submission of progress and field visits reports
Activity Result 4	Project management	Start Date: August 2009 End Date: July 2011
Purpose	Ensure proper and timely implementation of planned activities	
Description	<ul style="list-style-type: none"> - Establish PMU - Establish coordination and linkages between all project partners - Ensure timely implementation of the project activities 	
Quality Criteria	Quality Method	Date of Assessment
All planned activities properly and timely executed	<ul style="list-style-type: none"> -Progress reports -Final Report 	<ul style="list-style-type: none"> -End of each quarter and upon submission of progress reports -End of project upon submission of Final Report

ii. Risk Management

#	Description	Date Identified	Type	Impact & Probability (1= low, 5=high)	Countermeasures / Mngt response
1	The political situation and the unstable security situation in Lebanon may affect implementation of the project activities	Project preparation	Political	P=2 I=5	This risk is beyond the control of the proposed project. The project, however, will rely mainly on national available expertise which minimizes the risk associated with cancellation of missions by international consultants in case of deterioration of the political situation.
2	Community members not interested in stepping into a new economic activity	Project preparation	Operational	P=1 I= 5	As long as they expect economic benefits, this is not likely to occur. The project will provide the essential costs for the first two years of cultivation, awaiting for the irrigation water to be supplied by the main canal, which will improve the livelihood of local communities through planting wheat for the short term and future high cash crops once water is available.
3	Presence of cluster bombs in some areas might affect field work	Project preparation	Operational	P=2 I=3	The project will coordinate closely with UNMAC to identify the spots where cluster bombs are present in the target area. In case some plots were found to be contaminated, the project will make sure to coordinate with the UNMAC and the Lebanese Center for Mine Action ahead of time to be able to clean them before field work.
4	Funds needed for the completion of Canal 800 not received	Project preparation	Financial	P=2 I=5	The project will lobby for and work with the LRA to promote the funding and execution of Canal 800
5	Delay in the construction of Canal 800	Project preparation	Technical	P=4 I=5	The project will coordinate closely with the Council for Development and Reconstruction (CDR) responsible for the construction of Canal 800 to continuously assess the progress of works and ensure coordination in activities

VII. LEGAL CONTEXT

13. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of Lebanon and the United Nations Development Programme, signed by the parties on 10 February 1986.
14. The UNDP Resident Representative in Lebanon is authorized to effect in writing the following types of revisions to the Project Document, after consultation with the project partners:
 - i. Revision of, or addition to, any of the annexes to the Project Document;
 - ii. Revisions which do not involve significant changes to the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation;
 - iii. Mandatory annual revisions which re-phase the delivery of agreed project outputs or increased expert or other costs due to inflation, or take into account agency expenditure flexibility; and
 - iv. Inclusion of additional annexes and attachments
15. Upon completion of the project, the UNDP CO shall transfer ownership of all furniture and equipment purchased for the day-to-day operation of the PMU to the Government of Lebanon.

VIII. ANNEX 1: TERMS OF REFERENCE - PROJECT MANAGER

Key Functions/Responsibilities:

Under the direct supervision of UNDP and in close coordination Litani River Authority (LRA) and Friends of Abdel Aal, the Project Manager will be responsible for the overall execution of the project. The Project Manager will work in close coordination with UNDP, the Lebanese Government, the local beneficiaries, and the international team of experts from the technical backstopping agency. The specific functions of the Project Manager are as follows:

1. Project elaboration and management:

- Prepare detailed annual project work plan and budget breakdown in coordination with UNDP and the Project Board
- Develop TORs for local short-term consultants on project needs with the guidance of UNDP and assist in the recruitment process based on UNDP procedures
- Manage local project team and resources
- Draft technical and financial progress reports to UNDP and the Donor

2. Project implementation and delivery:

- Monitor project progress against set deliverables and timeframes
- Supervise and follow-up on all project delivery and execution at the different sites
- Ensure smooth and successful implementation of the various project activities
- Compile all technical needs assessment and draft the international bidding documents with the assistance of the technical backstopping agency and UNDP
- Assist in the entire procurement process for the works
- Proactively inform UNDP of project risks along with mitigation measures
- Ensure communication about the project is regular and accurate
- Integrate the project results and findings, with the assistance of the technical backstopping agency, to set the basis for a national sustainable energy strategy
- Prepare any follow-up project proposals as per the needs identified by UNDP.

3. Technical support:

- Review and provide technical advice on all project outputs
- Supervise the technical delivery of the sub-contractors and local consultants
- Provide policy and technical advice to Litani River Authority and UNDP on all water and environment related issues
- Provide regular training for the project team and local stakeholders to ensure proper project performance
- Liaise with the local communities to build capacity, ensure cooperation and involvement

Competencies/Qualifications:

The Candidate must have extensive knowledge of the national and local context relating to water and environmental issues. Some knowledge of the post-conflict situation is also preferable. The Candidate must be willing to travel extensively to the project site in South Lebanon and must have experience working with local communities. The Candidate must have strong planning and managerial skills to ensure quick project implementation and timely delivery of required outputs.

- Education: Graduate degree (MSc/MEng) in environmental, civil, irrigation engineering or environmental sciences or water science or closely related field.
- Experience: Minimum of 8 years of experience in the field. Experience in development projects and prior experience with UNDP and/or community-based projects is necessary. Computer experience.
- Language Requirements: Effective verbal and written communication skills in both Arabic and English. French is a plus.

ANNEX 2: APPROVED LRF PROJECT DOCUMENT



**LEBANON RECOVERY FUND
PROJECT DOCUMENT COVER SHEET**

Participating UN Organisation: United Nations Development Programme (UNDP)	Sector: Energy and Environment
Programme/Project Manager Name: Edgard Chehab Address: UNDP Lebanon Telephone: +961 (0)3 240034 E-mail: edgard.chehab@undp.org	Working Group Chair Name: Address: Telephone: E-mail:
Programme/Project Title: " Hydro Agricultural Development for Marjeyoun Area"	Programme/Project Location: South Lebanon
Programme/Project Description: The project will assist local communities in Marjeyoun area to benefit from a main canal supplying water to South Lebanon from West Bekaa. The project will show the advantages and efficiency of modern irrigation techniques, will propose the new cropping patterns in the region, and will support the establishment of a very much needed Water User Association. The project will have a direct impact on the livelihood of at least 1,250 households within 5 communities affected by the July 2006 conflict through extending the areas suitable for agriculture, and will provide direct assistance to the farmers in the area.	Total Programme/Project Cost: LRF: 2,000,000 USD Government Input: 200,000 (in-kind) Other: Total: 2,200,000 USD
	Programme/Project Duration: 2008 - 2010
Development Goal: Supporting Lebanon's recovery, reconstruction and reform activities through enabling infrastructure and reform for hydro agricultural development in South Lebanon.	
Immediate Objectives: Developing hydro agricultural infrastructure for 5 communities South of Litani River	
Outputs and Key Activities: The project will support the establishment of Water Users Association for proper management of water use, will produce topo-cadastral maps which are the bases for designing the irrigation distribution networks, will establish a land classification database as a prerequisite for the development of the hydrant implementation plans, and will execute land reclamation for an area of 522 ha setting up the infrastructure for the water distribution network.	
Working Group Review Date: _____ RRC Review Date _____ Steering Committee/Project Approval Group Approval Date: _____	

On behalf of:	Signature	Date	Name/Title
Chair, LRF SC		May 29, 2008	Minister of Economy & Trade
UNDP Lebanon			