



Council For Development & Reconstruction

Progress Report



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Please note that this report is also available on the internet at CDR's home page: www.cdr.gov.lb

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MESSAGE FROM THE PRESIDENT



In 2014, the Lebanese Government and the Lebanese public institutions combined their efforts to improve the level of public services and to withstand the repercussions of the Syrian crisis which placed huge strains on the economic and social activity and increasingly overburdened the infrastructure and public services. The Lebanese Government called upon the international community to scale up its support to help the Lebanese public entities in assuming their responsibilities which greatly outweighed humanitarian and rescue interventions and entailed significant development challenges.

The Council for Development and Reconstruction (CDR) and the Ministry of Social Affairs endeavored to seek funding to finance development programs and projects, as well as to integrate sectorial programs into plans and strategies aimed at addressing the negative impacts of the Syrian Crisis on Lebanon.

On the other hand, the CDR continued to implement the previously scheduled programs and to prepare for future projects. In 2014, new contracts were awarded across all sectors with emphasis on the water and wastewater sectors. Indeed, many contracts were awarded to outsource the repair, construction and installation of water and waste water systems across different Lebanese regions, noticeably a US \$200 million contract funded by the World Bank to supply areas of Greater Beirut with drinking water from the Awali River. In a parallel course, preparations have been underway to launch the project on the construction of the Bisri Dam, considered as a second phase of the project aimed at increasing water supply to Greater Beirut.

With regard to financial assistance, the total value of foreign funds secured in 2014, reached around US\$ 824 million (90% loans) and (10% grants) as detailed out in this report.

One of the major funding agreements signed in 2014 is the loan agreement pertaining to the construction of the Bisri Dam and its annexes, estimated at US\$ 474 million inclusive of US\$ 155 million for land expropriation.

The value of the foreign funds allocated in 2014, reflects the continuous support to Lebanon by the Arab and international institutions, despite the fact that the Lebanese Government has not yet completed a number of necessary legal and administrative procedures to activate these funds.

We hope that the constitutional institutions will shortly resume their regularity, which will normalize the cycle of infrastructure and social and economic development projects.

INTRODUCTION

This report presents an overview of CDR's activities during 2014. It contains discussion of significant achievements from 1992 to 2014, development during 2014 and the main projects in preparation.

Each sector includes three tables:

- The Sector Overview table lists projects that are complete or that are in progress. It includes the following information for each project:
 - The number and total value of contracts awarded up to 31 December 2014 (the value 0.0 indicates that the amount is less than US\$ 50,000);
 - The number and total value of completed contracts;
 - The number and total value of contracts in progress and the percentage of completion for each project (averaged across the live contracts related to each project)
- The Contracts Awarded in 2014 table lists the contracts awarded during the past year.
- The Contracts in Preparation table presents details of individual work packages or studies that are expected to be launched by CDR during the year 2015 and after.

The report deals essentially with CDR work. For completeness of information, reference is made, where appropriate, to the activities of Ministries and other public bodies. The tables, however, include information related to CDR activities only.



GENERAL OVERVIEW OF THE SECTORS

The activities of CDR cover various economic sectors. However, the extent of these activities varies from sector to sector in accordance with the Government's directives and Lebanon's free enterprise economic system. The role of the State is limited to the support and promotion of the private sector. CDR works in conjunction with the various ministries concerned by implementing investment projects and providing them with technical assistance.

Operation and maintenance of completed infrastructure projects remains the responsibility of the relevant ministries. However, CDR manages and implements operation and maintenance services that may be requested by the Government.

CDR is active in the following four main sector groups:

1- Physical infrastructure: Electricity, telecommunications and transportation;

2- Social infrastructure: Education, public health, social and economical development, land use and environment;

3- Basic services: Water supply, wastewater, solid waste management;

4- Productive and other sectors: Agriculture, irrigation, sovereignty services, tourism and others;

The total value of contracts signed by CDR between 1992 and the end of 2014 was about US \$ 12,491.30 million. About US \$ 7,991.80 million of the projects were completed, while works valued at about US \$ 4,499.51 million is

underway. These contracts are distributed among sectors according to the following ratios:

Sector	%
Electricity	12
Transportation	25
Water supply and Wastewater	15
Telecommunications and Post	7
Solid waste	18
Education	10
Public Health	3
Other sectors	10

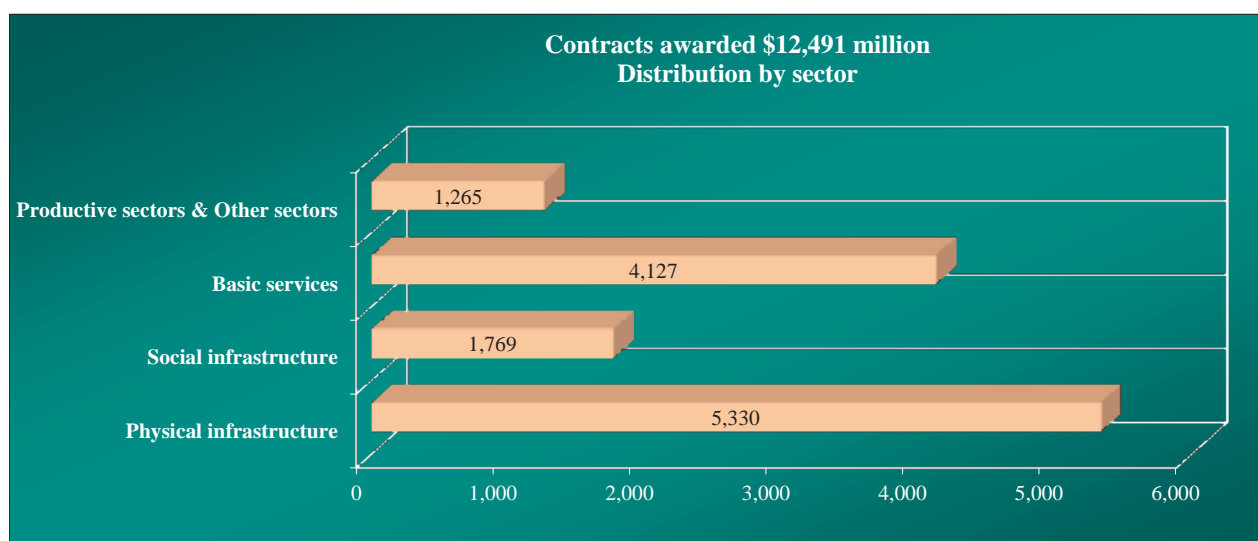
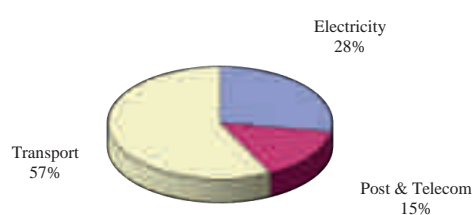
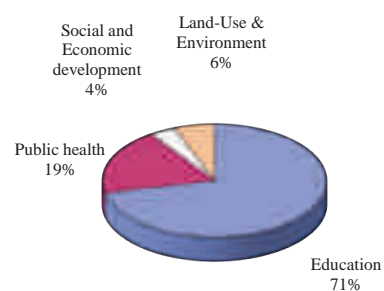
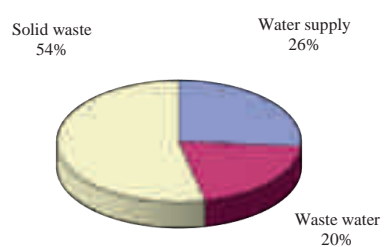
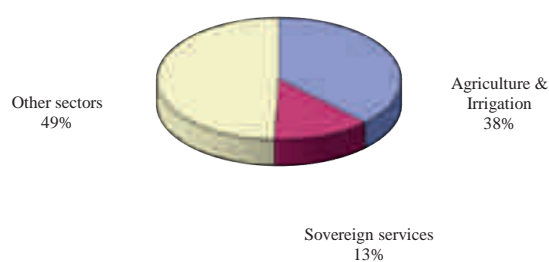
The charts that follow provide an overview of the distribution of contracts over the main sectoral groups, as well as the distribution of contracts over the specific sectors that make up these sectoral groups.

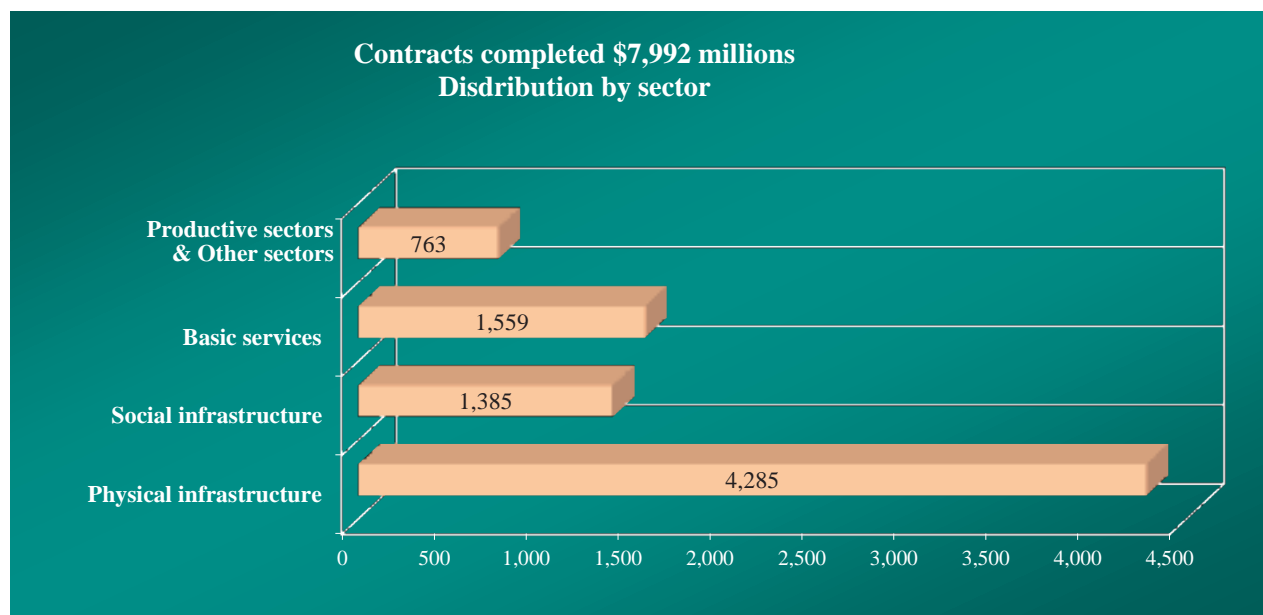
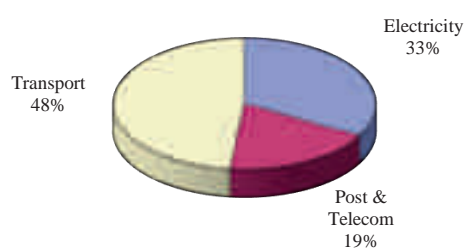
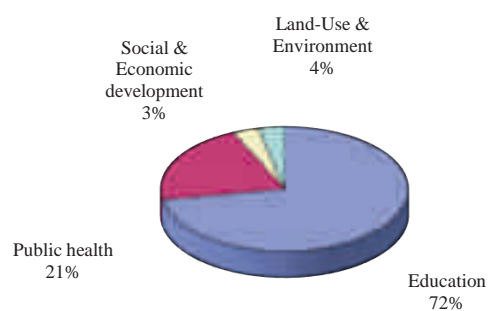
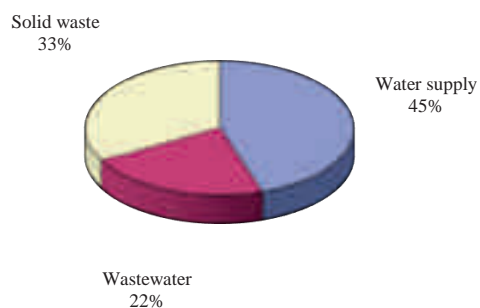
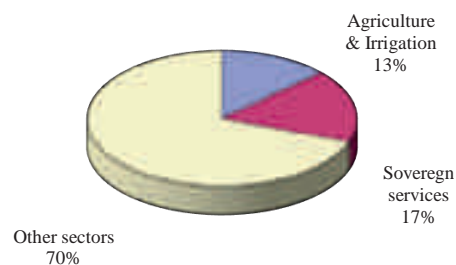
Total value of contracts awarded from the 31st of December 1992 till the 31st of December 2014 in millions of dollars

Sectors	Total Con- tracts (U.S. dollars)	Contracts In progress (U.S. dollars)	Contracts Completed (U.S. dollars)	Foreign funding (U.S. dollars)
Physical Infrastructure				
Electricity	1,471.87	52.05	1,419.82	1,283.02
Telecommunications, Posts	798.49	0.00	798.49	33.26
Transportation	3,059.81	993.31	2,066.50	1,087.37
Social Infrastructure				
Education	1,263.01	262.47	1,000.54	538.63
Public health	335.46	46.85	288.61	218.39
Environment and Re- gional Planning	103.74	55.73	48.01	82.17
Social and economical affairs	66.63	19.07	47.56	24.30
Basic Services				
Water Supply	1,082.59	383.05	699.54	719.95
Wastewater	837.86	492.30	345.56	469.41
Solid Waste	2,206.80	1,692.42	514.38	33.60
Productive sectors and other sectors				
Agriculture and Irriga- tion	476.30	376.04	100.26	276.94
Sovereign services	163.55	31.13	132.42	10.28
Other Sectors	625.19	95.08	530.11	239.30
Grand Total	12,491.30	4,500	7,992	5,017

Note: In case an addendum is signed and is part of a completed project, the value of the completed project will be moved to the section of projects in progress.



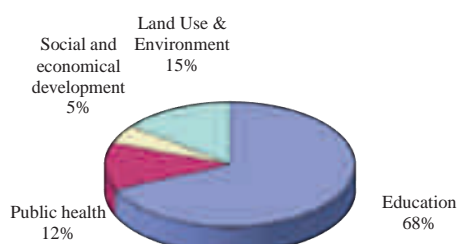
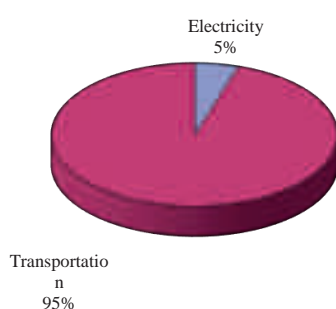
**Physical infrastructure \$5,330.31 million****Social and Economic sectors \$1,768.85 million****Basic services \$4,127.25 million****Productive sectors & Other sectors \$1,264.89 million**

**Physical infrastructure \$4,285 million****Social and Economic sectors \$ 1,385 million****Basic services \$1,559 million****Productive sectors & Other sectors \$763 million**



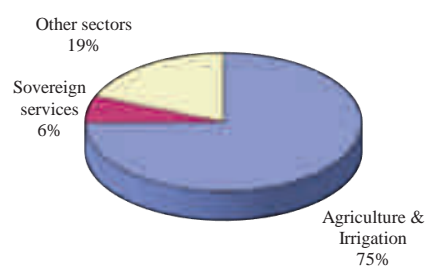
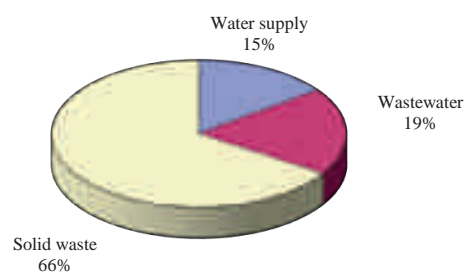
Physical infrastructure \$1,045 million

Social and Economic sectors \$ 384 million

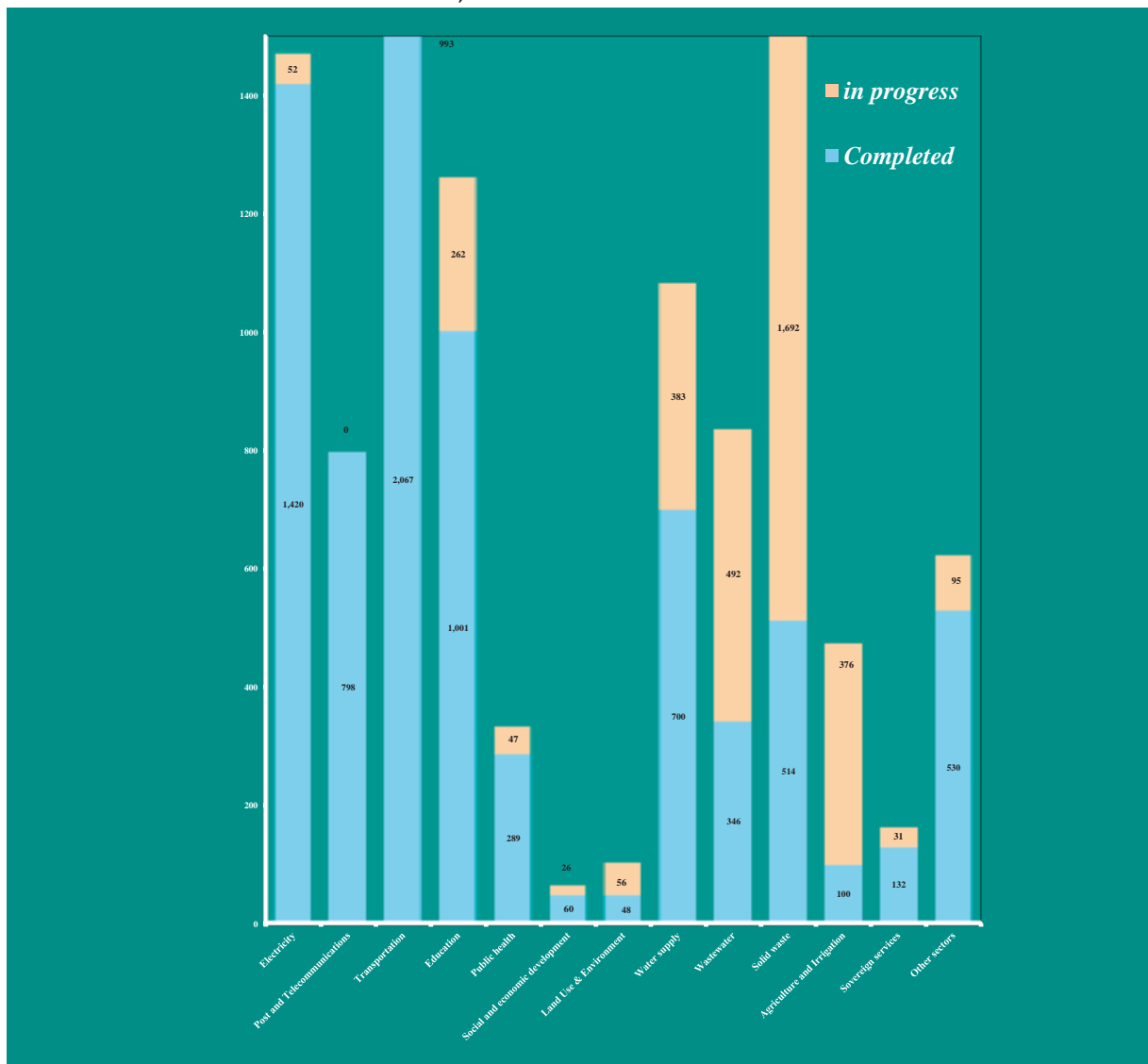


Basic services \$2,568 million

Productive sectors & other sectors \$ 502 million



Contracts awarded \$ 12,491.30 millions (completed & in progress) Distributed by sector



ELECTRICITY

I. Electricity Sector Overview

The subject of securing electrical energy supplies from renewable and non-renewable sources represents today a strategic priority and a key driver for achieving sustainable development in any community or in any nation. This trend is clearly reflected in the strategies adopted by countries seeking to develop their energy sector, and in their continuing calls to expand the scope of use in their energy mix, not only as a feasible solution to meet the growing demand for energy, but also as a strategic option geared at the eradication of poverty and the improvement of opportunities for accessing water, food, health and education services, not to say the least, in the contribution to economic development.

Experts, academics and workers in this sector have always called on executives and decision-makers to take a strategic choice to generate enough energy so as to establish a lasting source that takes into the account the need to protect the environment from consuming non-renewable fossil fuels, and to open up the way for upgrading social aspects, ecological balance, and economic efficiency.

And since the Lebanese economy, like any other economy, is linked to a key variable represented in the traditional way of producing energies, its development stands against the challenges of energy availability, which confines the choice orientation towards fossil fuel resource management and the establishment of a sustainable formula for the supply and development, accompanied with a low carbon emission policy. A stake we must adopt for re-po-

sitioning within the new global economic order through moving forward with a long-term strategy to develop key economic sectors to reach economic sustainability therefrom.

The expenditure by the Lebanese Government of not less than thirteen billion dollars to import fossil fuel material for EDL from 2005 until 2013, has pointed to the enormous subsidy for the sector by the state, which illustrates how challenging reforms have become for the Lebanese government to face in the foreseeable future.

Especially after the covenant it took upon itself to carry out the required reforms in order to transform the sector from a burden on the treasury and its economy to an effective sustainable nerve that would render a positive impact over the national income growth and consequently on the economy.

And for those who went along and followed well the course of events of the energy sector in Lebanon, will clearly see that the financial and the legislative realities, and the inability to implement the laws has led to the worsening of the many chronic problems that have hampered the core business and threatened the sectors and inflicted harsh damage to the national economy. The sector was made impossible to be tackled, unless a well rooted gradual reform policy capable of lifting all the aspects of the energy sectors including renewable energy and

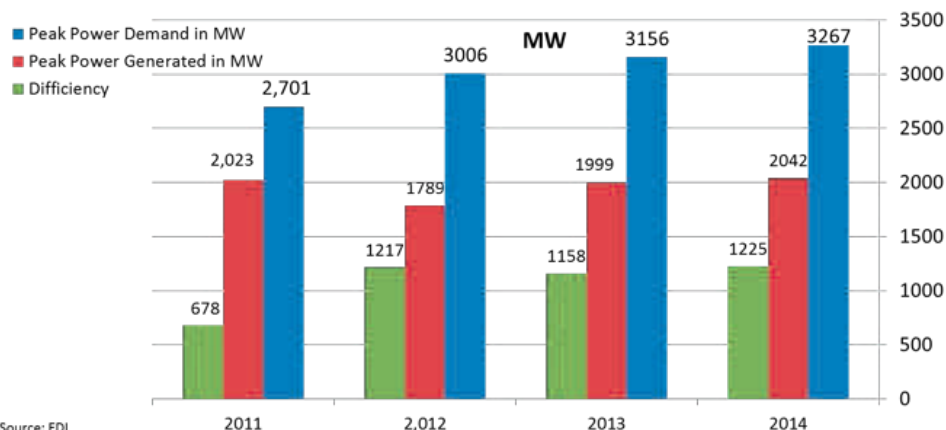
energy conservation is adopted. A comprehensive strategy for an energy sector system with all its details can constitute a mandatory continuous national policy. If supplemented with a realistic interim programmed policy it would expedite in the preparation, assemblage, auditing and documentation for an energy database for decisions to be built upon. Such policy can eventually lead to the preparation and ratification of modern laws that can guarantee to achieve the goals of the comprehensive strategy.

The Current Condition of the Sector

The electricity sector in Lebanon has entered a critical phase in terms of the production capacity deficit. The imperative issue requires reconsideration of the priorities in order to prevent further deterioration in the first phase, bridging the deficit in the second, and anchoring the required stability at the end.

In accordance with the Ministry of Energy and Water, the demand on electrical energy reached 20,036GWh in year 2014 (inclusive of the Syrian refugees demand), which can be approximated at an annual average of 2287MW of power demand, which is equivalent to 3267MW of peak power demand at a load factor of 70%.

The electrical energy produced and purchased in year 2014 reached 12,523GWh which accounts for an annual average of



1430MW of produced and purchased power or the equivalent of an annual peak of 2042MW of power. The current gap extended to 1225MW represents 38% at peak power demand, which is equivalent to 9 hours of daily rationing. Should this situation prevail, the gap is expected to increase and reach 1398 megawatts by the end of year 2015, which is equivalent to 41% of the demand, or about 10 hours of daily rationing.

Currently, the main effective peak capacity does not exceed 2042MW whereas the demand has surpassed 3260MW in 2014. Power generation in Lebanon is concentrated mainly on thermal energy production. Hydropower produced from plants does not exceed 4.5% from the total generation capacity in the country.

Power Supply from External Sources

Electric power is drawn from Syria to Lebanon through two main connection networks. The first network links Deir Nbouh plant in the north with the Tartous plant in Syria through two overhead lines of 120 megawatt capacity working on 220 kV of electrical pressure. The second network has a capacity of 80 megawatts through a single overhead line working on 66 kV of electrical pressure linking Aanjar substation plant with the Dimas plant in Syria. Lebanon has been drawing electrical power from Syria for a long

time now. In year 2000, Lebanon drew a peak 1418 million kilowatt-hour of electrical energy. It stabilized, at a later stage, at a yearly average of approximately 800 million kilowatt-hours, only 8% of the total power production or the equivalent of 90 megawatts of continuous power capacity throughout the year.

As for the Eight Arab connection network, and the electric energy purchase agreement from Egypt, the construction works and installations of the new Ksara HV substation have been completed. Efforts have succeeded in September 2009 to operate the new 400KV overhead lines, and terminate the new link with the Dimas transmission plant in Syria.

In year 2010, Lebanon benefited from approximately 120 megawatts of additional electrical capacity on the grid at an average feed of 21 hours per day, but the transfer was halted in year 2011. The new grid connection capacity can currently carry up to 300 megawatts of power. Lebanon is currently seeking to increase the import capacity from the countries of the region to cover for the remaining 180 megawatts.

The Main Problems of the Sector

1) The existence of high operational expenses:

- The two combined cycle power plants in Zahrani and Deir Ammar, as well as the two open cycle power plants in Sour and

Baalback operate on Gas Oil (Diesel) rather than natural gas.

- The Zouk and Jiyeh thermal power plants operate with low efficiency, which necessitate periodical overhauling activities.

- The need to operate Sour and Baalback thermal power plants outside peak times.

2) The existence of rationing and the increase in power failures are due to following reasons:

- Insufficiency of current power generation to meet all the needs, a fact that led to the spread of the local private generation phenomenon.

- Low public investments since at least 12 years (not in the rehabilitation and maintenance of the plants nor in the construction of new ones).

- The incompleteness of the 220 kV transmission networks.

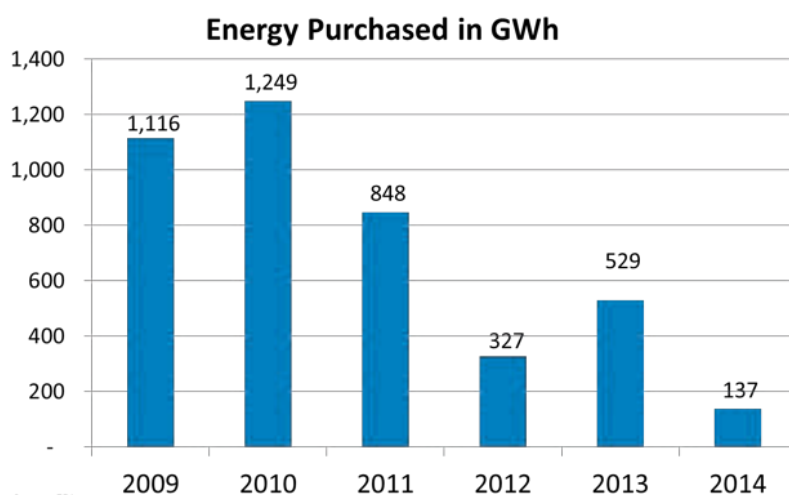
- The presence of the "bottle necks" on distribution networks and the increase of local breakdowns in crowded areas on peak times during summer and winter peaks.

- Loss of flexibility of electricity links between the old and the new grid.

- The absence of the usage of electronic accounting programs that study and organize the energy flow to ensure the supply and reduce the technical losses such as GIS.

- Deficiency in periodic maintenance operations by technical expertise for the main power plants, the substations, and the transmission network.

- High percentage of technical losses because of the incompleteness of the 220kV distribution grid, which varies from one area to another, exceeding in some areas the 15% average, to reach the 20% line in areas like the Bekaa.



- The problems in the distribution network include:

- The existence of old rusty steel distribution poles.
- The inexistence of standby systems.
- The inexistence of efficient monitoring of the meters.
- The inability to prevent theft aggressions.
- The inability to carry out required maintenance preventive measures.
- The inability to match the billing preparation measures.
- Collection and payment monitoring.
- The ill issuance and control of bill settlements.
- The loss of network components in some regions.
- Significant shortage of required equipment tools and machinery necessary to improve and accelerate the needed interventions mainly due to the great financial deficit that EDL is experiencing.

3) The decline in financial returns of EDL are due to following reasons:

- The global increase in oil prices has aggravated EDL's budget and increased the debt and caused a financial shortage, which became an increasing burden and a source of concern for the national treasury.
- The tariff structure hasn't been reconsidered since almost 15 years now. A transparent policy that decides whether electric energy is sold as a commodity or delivered as a service needs to be adopted.
- Continuous aggressions and illegal connections on the network.
- Incomplete bill collections.

4) The main institutional problems in the management of EDL are as a result of:

- An insufficient authority for the Board of Directors for taking ad-

equate decisions.

- Absence of clear criteria to evaluate the performance of EDL.
- Lack in technical training and difficulty in recruiting new qualified personell.
- Unavailability of reliable and transparent reports (statistics, finance, criteria, performance, etc.) represented, the least to say, in the inadequate account auditing since 2001.
- A huge deficiency in human resources represented by a present body of only 1902 employees when 5027 are needed; a vacancy for 3125 positions. The current body also loses 120 to 150 workers (8%) per annum due to retirement.

The Vision for the Future

In order to set in motion an efficient and sustainable sector, future visions to restructure the sector cannot be implemented unless the action plans include reform programs that would work on the short, medium and long terms in parallel. The reforms must encompass all the technical, financial and institutional aspects that would put in place an end to the financial deficit and ensure the auto-financing for future investments, as well as securing the good service at reasonable prices. Coordination efforts with the Ministry of Energy and Water is currently being carried out in order to crystallize a working paper, based on a medium term strategy, that will include working on the technical, economic, financial and institutional levels.

II. Main Accomplishments (1992 – 2014)

Main projects implemented by CDR for EDL during the 1992 – 2014 periods can be summarized as follows:

1) Generation

- Construction of two combined-cycle power plants in Deir Ammar and Zahrani with a capacity of 435 MW for each plant at a cost of US \$ 575 million,

achieved in 1999.

- Rehabilitation of thermal and hydraulic plants at a cost of US \$ 109 million, achieved in 1998.
- Construction of two open-cycle power plants in Sour and Baalback with a capacity of 70 MW for each plant at a cost of US \$ 61 million, achieved in 1996.
- The initiation of supply of a 120MW of electrical power from Egypt to the new HV transmission plant in Ksara through the Eight Arab connection network.

2) Transmission

The construction of the 220 kV network which included the installation of 339 km of overhead lines. Overhead lines that have been completely constructed are: Deir Nbough to Ksara line, Ksara to Aaramoun line, Aaramoun to Zahrani and Sour line, and the Bahsas to Bsalim line passing through Halat.

- The construction of 220 kV substations in downtown Beirut, Aaramoun, Mkallès, El Horsh, Ras Beirut, Halat, Ksara, Bsalim, and Sour between 1999 and 2001.
- The construction of 61 km of underground buried cables for the 220 kV network in the North and in Beirut in 1999.
- The restructuring of the 150kV and 66 kV transmission networks in 1997.
- The construction of 400 kV network and substation in Ksara allowing for the power exchange between the countries of the region.

- Work on completing the 1900 meter run of the Mansourieh line, essentially after the conclusion of the report that was prepared by the Minister of Health on 5/11/2010, which concluded in the inexistence of any significant health risks attributed to the exposures of non-ionized electrical and magnetic fields.

3) Distribution

- Rehabilitation of the distribution networks in 1997 at a cost of US \$ 112 million.



III. Progress of works in 2014 - contracts awarded before 2014

- The electrical transmission network expansion project: all works related to the expansion project of the electrical transmission network have been completed as specified above, except for the works regarding the installation of cables on poles in Mansourieh – Ain Saadé – Ain Najm, due to the objections expressed by local residents of the area. Efforts are currently being made to resolve the issue. Completion of the works is expected to be sorted out in 2015, if all goes well.

- National Control and Dispatch center: works started during the month of July 2006. The project is funded by the Arab Fund for Economic and Social Development and its overall cost is evaluated at approximately US \$ 25 million. The project is expected to be completed during 2014 knowing that the proposed amendments have been considered.

After repeated halts, due to several reasons, works of the center were re-launched in year 2010. Phase one of the project, which comprised 63%, was undertaken by CDR. The specialists were relocated to the new center and commenced on the operation of the advanced control programs in 15 major substations that linked Mkallès, Ain Mraisseh, Mssaileh, Gharbieh, Onesco, and Ras Beirut substations. The executed works are now estimated at 92%. They include all the works of the center, the connections with the major substations and with the power plants as well as the local testing and commissioning in all the major substations. The delays in connecting the center with the rest of the substations go back to the incompleteness of the Mansourieh link which incorporates the fiber optic lines that run in parallel with the high tension lines. This in turn hinders the

completion of the final testing and commissioning of some of the microwave lines. In addition, the need for securing some of the leased lines is currently being coordinated upon amongst EDL and the local concerned administrations.

The National Control Center currently monitors and controls 56 major substations and lies in wait for 15 others until connection problems are resolved.

- Rehabilitation and Expansion of Transmission and Distribution Networks in the Liberated regions:

The works for rehabilitation and expansion of the high tension 66KV transmission line and the 20KV/15 kV transmission distribution network in the liberated regions were awarded; however, the contract wasn't signed. The funding from the Iranian protocol was canceled. The total cost of the project was estimated at about \$ 25 million (US Dollars). CDR is currently seeking to secure alternative financing.

- The rehabilitation and Expansion Project of Al-Ayoun and Fneidek Transmission and Distribution Network in Akkar:

The completion of the 66KV line in Beit Mellat, in the area of Al-Ayoun and Fneidek in Akkar, has allowed the Beit Mellat substation, which was completed in February 2011, to be placed in operation. The 66KV line was completed in year 2012 right after the Kuwaiti funds and the bidding process were settled. The 5,150,000 euros project was designed to raise the transmission and distribution power capacity of the region from 10 to 40 MW.

- The Technical Assistance Projects for the Electricity Sector Reform Plan:

Right after an international tender was conducted during year 2007, three consulting service contracts were awarded that aimed at granting technical assistance within the framework

of the electricity sector reform plan as follows:

- In relation to the Ministry of Energy and Water:

Enhance the capacities of the Ministry of Energy and Water to implement the proposed reform actions in the sector policy statement. The main tasks assigned to the consultant were to assist the Ministry in the preparation of a national sector policy and fuel oil strategy. Part of the tasks was to review the proposals related to the supply of liquefied natural gas (LNG) to the Zahrani plant, and evaluate the proposals aimed at attracting private investments and reviewing previous studies regarding the establishment of the Electricity Sector Regulation Authority. Works are expected to be completed in September 2009.

Having secured the funds from the World Bank, CDR, in this respect, and in coordination with the Ministry of Energy and Water, entered into contract in October 2011 with Poten & Partners, a well-known consultancy specialized in strategic studies for building Liquefied Natural Gas facilities, in an effort to help select the best technology and site location for a suggested port aiming at securing the required Natural Gas quantities at the best possible price.

In April 2012, the Consultant completed all of the required tasks and submitted all the relevant reports, which contained:

- 1) A summary about existing worldwide LNG markets.
- 2) Lebanon's LNG demand up until year 2030.
- 3) A summary about the main LNG suppliers.



4) A detailed preliminary study for designing an LNG port after carrying out site assessments to 3 locations (Deir Ammar power plant, Zahrani power plant, and the Setaata area).

5) Three reports related to the Preliminary Environmental Impact Assessments of the 3 sites.

6) One report concerning the existing legal current conditions and the legal frames that should govern this sector.

7) The necessary capacity building for the specialists at CDR and at the Ministry of Water and Energy.

8) The preparation of the "EOI" (Expression of Interest) Terms of Reference for companies interested in bidding to build and operate a sea port for importing LNG including the purchase and operation of the Floating Station Regasification unit (FSRU) and the building of the sea port for receiving LNG through harboring the ships for emptying its loads. The goal of this TOR is to prepare a short list of qualified companies for invitations for bidding.

In completion to what was required, and in cooperation with the Ministry of Energy and Water, CDR entered into contract, through local funding, with the same consultant in October 2012, to perform the second phase of these strategic studies.

The consultant completed the required tasks in August 2013 and submitted the following reports:

1) Terms of Reference for the selection of consultants willing to conduct the Environmental Impact Assessments in support for the development of the Floating Station Regasification Unit to regasify LNG.

2) Term of Reference for the se-

lection of the developer of the FSRU.

3) Help in selecting 4 companies capable of importing LNG to Lebanon.

4) Help to evaluate companies' bids for the development of the FSRU.

5) A report covering the training works required for the staff of the local institutions.

- As for EDL: The improvement of the operational and financial performance of EDL, where the main duties of the consultant will be the preparation of a plan for improving the efficiency of power generation plants and for assisting in the implementation procedures. Reorganizing the supply duties of EDL, establishing the priorities for reducing technical and non-technical losses, providing assistance to complete current projects, organizing an inventory of assets and survey of audited financial reports and preparing the tender documents for the financial audit contract covering 2005 and 2006 are also included in the tasks. Consultancy services are expected to be completed in May 2009.

- As for the Higher Council for Privatization: To provide the necessary support for the Higher Council for Privatization for incorporating EDL in conformity with the Electricity Sector Regulation Law and the Ministry's plan for restructuring the sector. The tasks are to propose the organizational structures for companies that will emanate from EDL, including the detailed description of the proposed positions and the procedures to be followed; along with the preparation the preliminary work plans for these companies. It is also required to organize the inventory of assets and determine the capital levels and the share structure of these companies.

Right at the finish line of the first phase of the contract, CDR, entered into a contract with Booz and Co. to undertake another

complementing study to the first phase in order to provide the Higher Council for Privatization with the required support in corporatizing EDL. The contract was signed in cooperation with the Ministry of Energy and Water and under finance from the World Bank. Booz and Co completed the studies by the end of May 2012 and submitted the reports related to the detailed implementation procedures to execute the plan.

It should be noted that the estimated total cost of the technical assistance contracts are of approximately US \$ 6.5 million, distributed in the following manner:

US \$ 5 million from the World Bank grant, about US \$1 million from the French Development Agency grant, and US \$ 500,000 from local funds to cover for the local tax expenses.

The designated consultants are to submit their reports gradually in due time in accordance with their terms of references, where the revisions by the concerned institutions are expected to constitute an opportunity for a close coordination amongst the involved parties that will facilitate the decision making process regarding the electricity sector reforms.

- The Comprehensive Master Plan for the Generation and Transmission of Power: Electricité de France (EDF), which was placed in charge of drafting the Master Plan from a grant financed by the French government, has submitted a draft report regarding power generation. Based on the discussions with concerned officials over the remarks, EDF issued the second version of the report in June 2008 with expectations to issue the final version in 2010.

IV. Main Projects Under Preparation (2015 – 2016)

Generation sector:

- o The rehabilitation of Zouk and



Jiyyeh power plants:

	Unit number	Installed Capacity in MW	Actual capacity in MW
Jiyyeh plant	1	62	52
	2	62	38
	3	69	58
	4	69	57
	5	69	54
	Total	331	259

	Unit number	Installed Capacity in MW	Actual capacity in MW
Zouk plant	1	145	90
	2	145	-
	3	145	92
	4	172	110
	-	-	-
	Total	607	292

The installed and actual capacities of the Zouk and Jiyyeh power plant units are as follows: The total installed capacity of both Zouk and Jiyyeh power plants are 938 MW, whereas the average effective operational capacity is 551 MW. EDL is currently conducting the rehabilitation feasibility study for the 2 plants, in addition to detailed studies and the preparation of the tender documents. The Arab Fund for Economic and Social Development expressed its readiness to finance the rehabilitation of units 3, 4 and 5 of the Jiyyeh power plant (since units 1 and 2 which were erected in 1970 are expected to be replaced) as well as all the four units of the Zouk power plant in accordance with a 5 to 6 year work plan schedule. Once fulfilled, the rehabilitation is expected to raise the effective capacity of both plants to 800 MW, in addition to the preparation of the required provisions for the replacement of units 1 and 2 of the Jiyyeh power plant. Award-

ing of the rehabilitation project is expected to start in 2015.

o Construction of New Generation Plants: Based on the first outcomes of the master plan conducted by EDF, various proposed options to construct new power plants are overlaid. The Ministry of Energy and Water awarded a contract for the erection of a new power plant in Deir Ammar, and another for the erection of new generation units in Zouk and Jieh power plants.

o CDR signed a contract with the consulting group "Mott MacDonald /Pan Arab Consulting Engineering/ Clyde and Co LLP" to help the Ministry of Energy and Water in November 21, 2013, to assist the Ministry of Energy and Water in preparing required feasibility studies for the addition of 1500MW of electric power capacity generation through Public Private Partnership schemes. The consultant completed the first phase tasks in July, 2014, and the second phase tasks in June of year 2015.

o Power transfer from Steamers: the contract between the Ministry of Energy and Water and one of the Turkish companies is expected to continue during year 2014. The two steamers secure close to 270MW of power in Zouk and Jieh power plants.

Transmission sector:

o Construction of substations in various regions:

Amongst the current priorities are the five substations that have been determined to treat the suffocations witnessed on the transmission networks, mainly at: The Southern Suburbs (Dahieh), Bahsas (Tripoli), Marina (Dbayeh), and Ashrafieh.

Technical Assistance and Sectoral Studies:

o The Master Plan Study for Distribution in Beirut and its Suburbs:

Following EDL's request from CDR to seek funding for the Master Plan study for the Power Distribution in the Greater Beirut area, the French Agency for Development (AFD) has expressed its willingness to finance the study through a grant. The consultant EDF, who prepared the Master Plan of 1998, is expected to be nominated to carry out the works, which are anticipated to be finalized in 2015.

The Master Plan of the Greater Beirut area includes: the updating of the Master Plan of 1998 for the city of Beirut, the area extended from Mkalles to Aaramoun, in addition to the Master Plan for the southern and northern suburbs.





Power Plant Deir Aamar



Control Center For Advanced Power Management



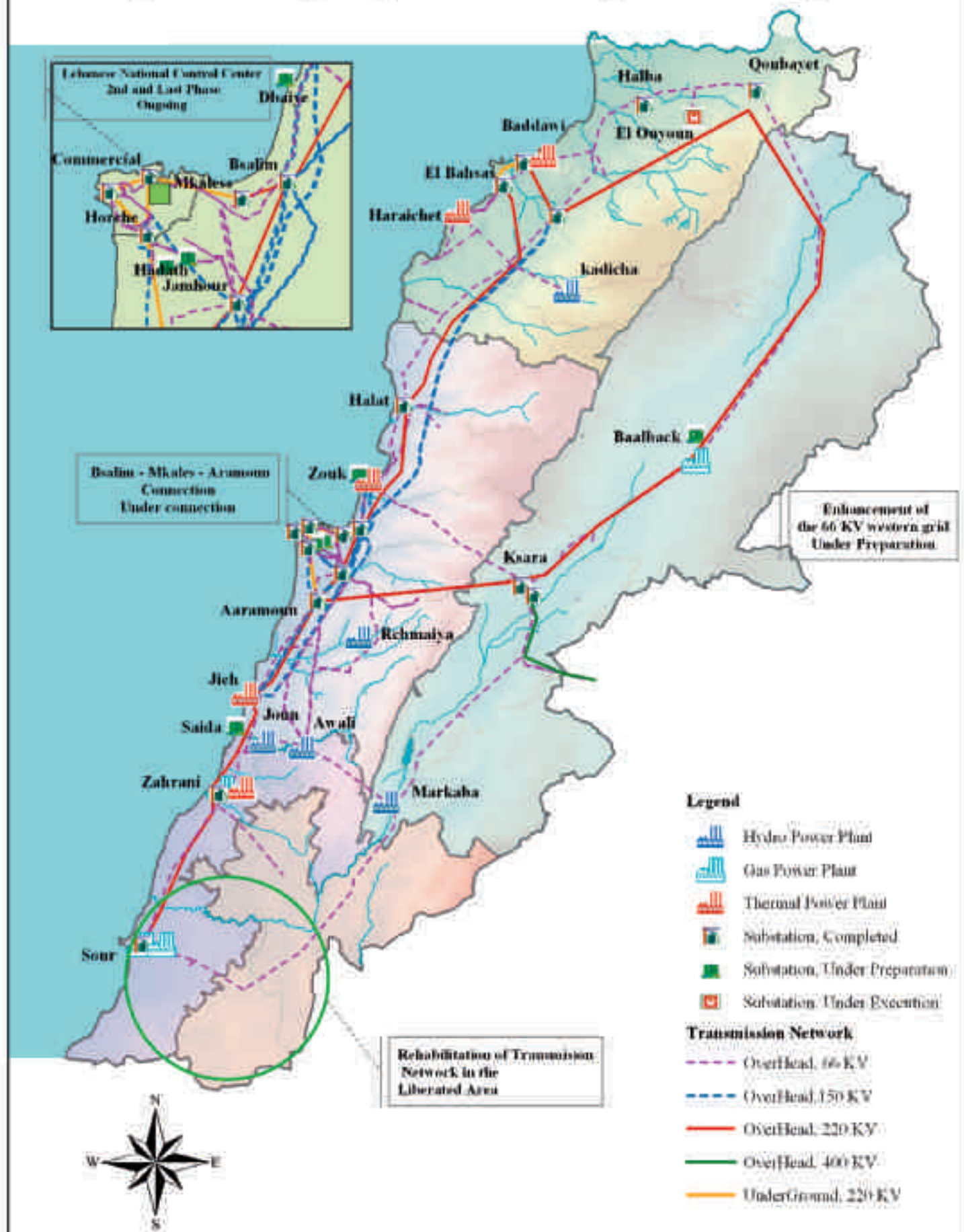
FatimaGul Ship for Power Generation



Eight Countries Interconnection Network -Ksara Station

Electricity

Completed, Ongoing & Under Preparation Projects



POST AND TELECOMMUNICATIONS

A group of contracts was awarded to foreign and local firms for the rehabilitation of the Public Switched Telephone Network (PSTN) to increase its capacity to 1,730,000 lines, i.e. the equivalent of one line for every three persons. The total cost of these contracts, which were completed at the end of 2002, amounted to about US\$ 775 million.

At the same time, a mobile telephone system (GSM) was introduced through concessions awarded to two competing operators. The two operators undertook the necessary investments and the government collects now revenue from this operation.

The government has repossessed the two mobile telephone systems, the PSTN and the GSM systems. However, several projects relating to the development of this sector are still required to render it competitive and capable of handling modern technologies, particularly in the fields of information exchange, state of the art networks and the internet.

Achievements during the period 1992 - 2014

Installation of telephone exchanges (switching contracts): The related contracts and contract amendments (about US\$ 145 million) provide for the installation of 313 telephone exchanges with a total capacity of 1,142,000 lines in all regions of Lebanon. These were completed at the end of 2001. Three telephone exchanges for international calls and eight telephone exchanges for national calls have also been installed. The exchanges provide Caller Identifi-

cation Presentation (CLIP), voice messaging services and 13376 Integrated Line Services Digital Network (ISDN) lines.

Three contract amendments were signed to increase the total capacity of the exchanges by 48,000 additional lines (US\$ 8.8 million) and to provide 17,100 additional ISDN lines and four new exchanges, which were installed at the end of 2002. Thus, the total number of telephone lines reached 1,190,000 and the total number of digital (ISDN) lines amounted to 30,476.

Modernization of telephone exchange programs and equipment: The telephone exchange programs and equipment have been recently updated to comply with technical developments in the telecommunications sector and to add many new services for subscribers and exchanges. The cost of these works amounted to about US \$ 25 million. The project covered all main and branch exchanges, including those designated for international telecommunications.

Rehabilitation and extension of the Public Switched Telephone Network (PSTN): This project covered the rehabilitation and extension of the Public Switched Telephone Network (PSTN), at a total cost of US\$ 550 million, for improving communications among all regions of Lebanon. It included the preparation of the studies for plans and installation of the local telephone network.

The first lot of PSTN contracts covered the following components:

- Installation of 971,600 primary pairs (connection from exchanges to local distributors);
- Rehabilitation of 123 telephone exchange buildings and con-

struction of 185 new buildings in all Lebanese regions;

- Installation of the Wireless Local Loop system. This system is suitable for rural areas where the cost of telephone line installation is high;

- Installation of advanced digital transmission systems to interconnect all Lebanese regions.

The second set of contracts was implemented in two phases by the Ministry of Telecommunications. The first phase, known as OSP-1 (Outside Plant-1) covered the installation of 200,000 lines, while the second phase, known as OSP-2 (Outside Plant-2), covered the installation of 600,000 lines in rural areas.

The first group of PSTN contracts was completed at the end of 2002, while the works of the second phase were completed at the end of 2003.

The leased lines project was also completed at the end of 2002 by the Ministry of Telecommunications at a cost of US\$ 10 million. The project aimed to provide leased telephone lines to corporate clients.

Installation of public telephone booths: The CDR supervised the installation of 4000 public telephone booths distributed in all Lebanese regions. These works were installed by Ministry of Telecommunications (MOT) and completed by the end of 2005.

International telecommunications: Several projects for improving international telecommunications have been completed. The most important of these include:

- Installation of two submarine fiber optic cables: The first connects Tartous (Syria) with Tripoli, Beirut, Saida (Lebanon) and Alexandria (Egypt) with a capacity



to handle 9,000 simultaneous calls; while the second connects Lebanon, Cyprus, Crete and France and can handle 7,560 simultaneous calls. The total cost of the project was about US\$ 12 million;

- Installation of a fiber optic and wireless connection between Beirut and Damascus with a capacity of 189 simultaneous telephone calls at a cost of about US\$ 1.34 million;

- Installation of ground earth satellite stations in Arbanieh and Jouret el Ballout at a cost of about US\$ 4 million and US\$ 5 million, respectively.

Several other contracts have also been completed:

- Installation of a control and management system for transmission and switching equipment (US\$ 577,000);

- Restructuring of the telecommunications sector, re-organization of the administration and preparation of studies for creating marketing services and commercial agencies (US\$ 7 million).

Posts

Projects in Progress

Postal services: A contract was signed in mid 1998 with a Canadian consortium for the operation of the postal services (mail distribution, counter services, express mail, philatelic services, etc.) in all regions of Lebanon. The consortium was responsible for rehabilitating and equipping all post office buildings, street and property numbering and mail box installation. The cost of this project was approximately US\$ 50 million. Since the contract is in the form of a concession (BOT) no cost was borne by the Lebanese Government.



TRANSPORTATION

Land Transportation

1- Overview of the land transportation sector

After the Lebanese war, reconstruction projects and plans followed successively, such as the Urgent Rehabilitation Program of 1991, the "Horizon 2000" program of 1993, the five-year Economic Development Plan of 1999, and the Development Program of 2003. As a consequence of the reconstruction era, the land transportation sector has witnessed, since 1992, a vast public works program covering a wide range of infrastructure projects. Between 1992 and 2013, the aggregate value of awarded projects totaled around US\$ 2258,33 million, of which US\$ 1273,58 million of projects that were completed by the end of 2013 and US\$ 984,75 million of projects that are still active to date.

Recognizing the need to develop a sustainable land transport sector, the Council for Development and Reconstruction (CDR) launched a vast array of road infrastructure projects to help achieving safe, secure and sustainable land transport system across all Lebanese regions, including inter alia the following:

- Coastal road project;
- Beirut-Syrian border road project;
- Penetrator roads connected with Beirut ring road project;
- Urban Transport Development Project (UTDP) for Greater Beirut and Mount Lebanon;
- Renovation and upgrading of Beirut road network;
- Renovation and upgrading of Beirut suburbs road network;
- Renovation and upgrading of main and secondary roads in Lebanese regions;

- Construction of new main and secondary roads in Lebanese regions.

The CDR completed part of the above-mentioned projects, while other projects and project components are still underway and will continue in the next few years. The CDR continues to explore opportunities and continues negotiations with donors and stakeholders to secure the technical and financial requirements to award the remaining contracts and complete these projects.

2- Main projects achieved (1992 – 2014)

The CDR focused on the activation of the two main axes in Lebanon: the coastal road and the Beirut-Syrian border road. In this context, several projects were completed and a number of projects are underway to guarantee an efficient, fast and safe transportation system. In the context of the coastal road, many contracts have been executed, mainly:

1. Completion of study to apply the International Road Agreement in Lebanon.
2. Completion of study and preparation of tender documents for the remaining works to complete Sour-Naqoura road.
3. Expansion and renovation of Abdeh-Homs-Abboudieh highway.
4. Execution of the Abdeh-Qoubbet el Choumra road within the framework of northern coastal road works until the Syrian borders.
5. Execution of the Homs-Aridah highway within the framework of northern coastal road works until the Syrian borders.
6. Completion of the rapid northern coastal road: Chekka-Tripoli-Bohsas section.
7. Renovation Tabarja-Chekka highway.

8. Renovation of coastal road from Daoura to Tabarja.

9. Renovation of Nahr el Kalb intersection.

10. Renovation of coastal highway in Nahr el Kalb.

11. Renovation of northern Beirut entrance for the lane extending between Daoura and Tabarja.

12. Repair of landslide at Adma interchange on the northern coastal highway between Tabarja and Nahr el Kalb.

13. South highway, Sidon sea-front section (phase 1).

14. South highway, Sidon sea-front section (phase 3).

15. South highway, Sidon sea-front section (phase 4: between the municipal stadium and the rest house).

16. South highway, sections of Zahrani, Sour, Cana crossing, Phase 1: Zahrani-Babilieh

17. South highway, sections of Zahrani-Sour-Cana crossing, Phase 2: Babilieh-Abou el Aswad.

18. Installation of street lighting and execution of road traffic safety works for Phase 3 of South Highway, Zahrani-Sour-Cana crossing between Abou El Aswad interchange and Burj Rahhal intersection; and completion of unfinished street lighting and road traffic safety works of Phase 2 of this highway, falling between Babilieh interchange and Abou el Aswad interchange.

19. Execution of phase 4 road works of South Highway Zahrani-Sour-Cana crossing between Litani Bridge and Burj Rahhal main road.

20. Reconstruction of Masbah bridge and the bridge located near the Ministry of Displaced on top of South-Beirut highway in Damour.

21. Execution of phase 5 road works on the Sidon coastal road, including bridge construction in Sinniq region, connecting the coastal road with the South



highway.

22. Technical audit of traffic safety level resulting from the expansion of the coastal highway between Nahr el Kalb and Tabarja.

Within the context of Beirut-Syrian frontier road:

- Execution of works complementing the project aimed at providing road traffic safety installations and material on the frontier road extending between Lebanon and Syria in Masnaa Region.
- Execution of Saoufar Bridge reconstruction project and a section of the highway that was destroyed during Israeli attacks of July 2006.
- Renovation and asphaltting of the Damascus road, Hazmieh-Saoufar section.
- Renovation and asphaltting of the Mdeirej-Masnaa road.
- Execution of Saoufar Bridge reconstruction project and a section of the highway that was destroyed during Israeli attacks of July 2006 (including annex No.1).
- Completion of unfinished works within the framework of Saoufar Bridge reconstruction project and a section of the highway that was destroyed during Israeli attacks of July 2006 (including annex No.1)
- Completion of the expansion and renovation of Rayak-Baalback section (from Douris to Baalback with Baalback entrance from Tell Aammam intersection to Rayak) as part of the rehabilitation project of Chtaura-Rayak-Baalback Syrian border road.
- Renovation of Camille Chamoun Boulevard between the Chevrolet and Galerie Semaan intersections.
- Renovation and expansion of Taadod-Rayak road, within the project of Chtaura-Rayak-Baalback-Northern Lebanese border project, parts 1 and 2.
- Within the framework of Chtaura-Baalbek- Syrian border

road (El Kaa): execution of remaining road works to renovate Baalback east entrance.

The problem of transportation in urban areas is worsening, especially within Greater Beirut and its surroundings, where private cars constitute the main transport means, which will necessitate, if no public transportation is developed, the creation of additional spaces for roads and car parks in addition to adopting a developed system to manage traffic.

Therefore, the CDR conceived a project to develop the current transportation network of Greater Beirut and Mount Lebanon.

Urban Transportation Development Project for Greater Beirut and Mount Lebanon:

This project aims at facilitating the traffic flow within the Greater Beirut area and is composed of three components:

- Improvement of main traffic axes, which includes the construction of bridges and tunnels at 19 intersections and the execution of related site works along main roads.
- Installation of 220 traffic lights and 30 traffic-monitoring cameras, traffic signs, road markings, and creation of a monitoring and management center for traffic circulation, and improving the pedestrian walkways.
- Parking management program with parking meters for 5000 cars.

Within the context of Urban Transportation Development Project for Greater Beirut and Mount Lebanon:

- Daoura bridge
- Antelias bridge
- Mathaf intersection
- Bchamoun-Aaramoun
- Hayek bridge
- Organize and launch an awareness campaign
- Policemen training
- Installation of traffic lights and traffic-monitoring cameras (annex number 1) (civil works and installations)

- Installation of road-side parking meters.
- Providing the Lebanese Traffic Management Center with computers and other devices.

Beirut entrances connected with the Ring Highway:

The ring highway encircling Beirut and the series of penetrators connected to this highway is anticipated to reduce traffic congestion at the capital access points and facilitate traffic between the North and the South. Detailed plans of the penetrator road network were divided into 3 sections:

- Beirut Northern access point
- Beirut Central access point
- Beirut Southern access point

Among the main completed projects:

- Execution of the passageway beneath the Mar Mikhail intersection, within the Urban Transportation Development project;
- The Antelias bridge, within the Urban Transportation Development project;
- The passageway beneath the Tayyoun roundabout, within the Urban Transportation Development project;
- Provision of furniture to the Traffic Management Center;
- Provision of computers and other devices to the Lebanese Traffic Management Center;
- The passageways beneath and on top of the intersection between the airport road and Chiyah boulevard
- The Tiro road
- The Adlieh connection
- The Haret Hreik-Airport connector
- The Hazmieh-Airport connector (between Camille Chamoun Boulevard and Haret Hreik intersection)



- The Cocody-Cola 1 and 2, in addition to Cocody interchange
- The Khaldeh-Cocody road
- The Chatila roundabout
- The Chatila-Kafa'at road parallel to Nahr Beirut (PN3)
- The Adlieh-Damascus road (A1) extending to as-Sayad interchange
- Construction of a bridge and tunnel at the Mkalles roundabout (with annexes 1 and 2)
- Review of the study pertaining to Charles Helou interchange connecting the Beirut-Tripoli highway "Beirut Port-Nahr el Mott" section with Charles Helou Boulevard next to the Lebanese Emigrant Statute, which is ratified by Decree 9308, of 08/10/1996.

Rehabilitation of roads in Beirut suburbs:

Among the main completed contracts:

Northern suburbs: works are completed on the Bourj Hammoud, Jdeideh and Zalka road sections, the roads parallel to Nahr el Maout and Nahr Antelias, Dbayeh section, Nahr Beirut-Dawra road, the road replacing the railway track inside Bourj Hammoud. Rehabilitation works of Sin el Fil road and Saloumi-Naba'a-Nahr el Maout.

Southern suburbs: works completed to date are: road networks at Chiyah boulevard/adjacent streets axis, Choeifat-Khaldeh road, Haret Hreik storm water drainage tunnel, as well as the sections of Mreijeh, Kassis, Ghobeyri, Haret Hreik, Borj el Brajne, Furn el Chebbak and Ain el Roumaneh. Also, the rehabilitation works of Jamous road and associated services are also completed.

Rehabilitation of primary and secondary roads network: and opening primary and secondary

roads in the Lebanese regions: Major contracts completed:

- Execution of site works at Gebrayel's entrance and passageway, Rahbeh's entrance and passageway, and Birkayel's passageway and an internal road in Fneideq
- The rehabilitation of the road of Beit el Faqs-Karsita-Nemrine square
- The two interchanges of Hadeth el Joubbe and Hasroun and the Diman road (Qadisha roundabout)
- Ehden interchange – Phase 2
- The rehabilitation of Nahr Ibrahim-El Adra road
- Execution of remaining works of Chnaniir-Dlebta project
- The Halba-Bireh-Qobbayat road, including two bridges in Qoubbayat
- Road Connectors in Bcharre
- Upgrading and expansion of al-Madfoun-Kfifan road
- Upgrading and expansion of Zgharta-Ras Kifa road
- The Ayto-Ehden road
- Rehabilitation of Ardat-Majdalya road
- Grubbing and construction of the road of Daael - Basatin al Ossi - Beit chlala - lower Tan-nourine
- The Ehden interchange – Phase I
- Ras Kifa-Ayto road
- Kfar Harra-Bire
- Chadra-Mqailbe
- Aandqet-Konieh
- Akroum-Kfartoun
- Ardat-Majdalya
- Renovating and asphaltting Beit Mery road
- The new road extending between Jounieh-Bkerke-Harissa
- Ghazir-Kfour-Fatqa connector
- Jeita-Aintoura roundabout connector
- The Ajaltoun interchange
- The rehabilitation of the road extension between Dbayeh-Antelias with Rabieh-Naccache connector
- The Deek el Mehdi-Naccache-Rabieh intersection
- Beit el Heith – Kartaba project (Phase I extending from Beit el Heith to Sawaneh – 5km).

It is worth mentioning that this report outlines the projects that have been referred to the CDR by the Construction Projects Council "مجلس تنفيذ المشاريع الإنشائية" and the Construction Projects Council for Greater Beirut "مجلس تنفيذ المشاريع لمدينة بيروت الكبرى", i.e:

In the context of the Development of Transport System in Greater Beirut project:

- The rehabilitation and lighting of Kuwait street and its surroundings

In the context of Renovation and Improvement of International Roads project and the Coastal Road project:

- Phase 1 of south highway Jiyeh-Zahrani section
- South highway project, Sidon coastal road (phase 2)
- South highway project, Sidon coastal road (phase 3)
- Deir Zahrani-Nabatiye road and Deir Zahrani-Azze Romine road
- South highway section of Rmeileh intersection and Sinniq connector
- Construction of Jadra entry and exit points
- Construction of Qalamoun and Balamand entry and exit points, with pedestrian passages in Qalamoun and Na'emeh
- Lighting installations on South highway Jiyeh-Zahrani-Abou el Aswad section
- Lighting installations on South highway Jiyeh-Awali and Sinniq-Zahrani section
- Road circulation signage and protection barriers on South highway Jiyeh-Zahrani section
- Execution of South Highway phase four Zahrani-Tyre section-Kana diversion between Litani bridge and Bourj Rahal main road.

Within Beirut-Damascus road (masnaa) project:

- Hadath -Masnaa highway, ex-



ecution of Saoufar-Mdairej connector

- Aley access points project
- Review of plans and land acquisitions pertaining to Sections 1, 2, 3, and 4 of the project on the planning and upgrading of the road extending from Zouk Mosbeh – Mairouba- Kfardebian – to Tibeh (Baalback), reconciliation contract

3- Work progress during 2013 in contracts awarded before 2014

The following projects are underway:

Within the framework of coastal road project

- Rehabilitation of Sour-Nakoura road;
- Execution of works on Deir Ammar-al Abdeh road;
- Execution of street lighting and safety installations works for phase 3 of South Highway Zahrani-Sour-Cana crossing between Abou El Aswad interchange and Burj Rahhal bifurcation;
- Completion of unfinished street lighting and safety installations in Phase 2 of this highway, falling between Babilieh interchange and Abou al Aswad interchange;
- Execution of a slope serving south traffic towards Borj Rahhal road, and execution of two lower passages within Abbasiye interchange;
- Execution of part 1 works of phase 5 extending from Abassiyeh to Cana intersection (from 25+900 to 30+300) as part of the south highway, Zahrani section, Tyre-Cana diversion project;
- The works of Nahr el Maout interchange (with annexes 1, 2 and 3);
- Execution of Tripoli west ring road (Mina-Baddaoui section).

In the context of Beirut-Masna'a Road:

- Execution of Arab highway Mdeirej-Jisr el Namliyah-Chtaura-Taananayel, Phase 1 (Jisr el Namliyah (Bouarej)-Chtaura-Ta-

ananayel);

- Expansion and rehabilitation of the current Damascus road section 3 Aley-Saoufar (with annex number 1);
- Improvement of internal Bhamdoun road as part of the project aimed at expansion and rehabilitating the current Damascus road (Hazmieh-Saoufar section);
- Expansion and rehabilitation of Hazmieh-Jamhour road – Phases 1 and 2 (execution of Camille Chamoun boulevard-Sayyad roundabout (1.4 km));
- Baalechmey-Saoufar section (6.5 km);
- Execution of the works of part II of the various construction projects at the Masnaa border point;
- Installation of traffic safety equipment on the Lebanese-Syrian border road in Masnaa;
- Execution of complementary works for the project on the installation of of traffic safety equipment on the Lebanese-Syrian border road in Masnaa region;
- Execution of Taananayel-Masnaa section of the Arab Highway project;
- Expansion and renovation of Rayak-Baalback section as part of the project on the rehabilitation of Chtaura-Rayak-Baalback-Syrian border road.

In the context of the Urban Transportation Development project in Greater Beirut and Mount Lebanon:

- Mecharafieh bridge (upper passageway works at Chatila Kafaat intersection boulevard Chiyah-Mecharafieh;
- Sami el Solh tunnel (Sami el Solh avenue intersection with old Damascus road);
- Passageway beneath Bechara el Khoury intersection and Istiklal avenue;
- Execution of Jal el Dib intersection;
- Execution of bridge works and tunnel in Mkales;
- Rehabilitation of Dekwane roundabout and connected roads;
- Solving the problem of the lim-

ited height beneath the Beirut River Bridge on the Dora-Karantina highway, and beneath the bridge stretching to Bourj Hamoud above Emile Lahoud Highway and Beirut River

- Training Internal Security Forces officers on road traffic, traffic crisis and on how to deal with problems in a practical and professional manner;
- Purchase of motorbikes for the Internal Security Forces (Phases 1 and 2);
- Purchase of wireless devices for the Internal Security Forces. In the context of the Metn rapid highway:
- Landslides repairs on the Metn Highway Jouret El-Ballout – Baabdat section;
- Grubbing of the Bqalea – Sannine road within the “High mountains Road” project (with annexes 1 and 2);
- Construction of the Roumieh – Beit Mery interchange and Kanabet Broumana bridge (with annexes 1-2-3);
- Site works for wastewater evacuation in Mar Chaaya to avoid causing damage to the Metn rapid highway in the area of Mar Chaaya-Aatchaneh intersection.

Miscellaneous roads in the Lebanese regions:

- Btghrine-Zaarour connection;
- Jouret el Ballout-Deir Mar Chaya connection and Deir Mar Chaaya-Aatchaneh connection, Baabdat connection, Deir Mar Chaya-Baabdat connection;
- Construction of Gebrayel passageway, Rahbeh passageway and entrance, Birkayel passageway and the internal road of Fneideq;
- Completion of remaining grubbing works on the Mrah el Sreij-Bakhoun- Taran-Hazmieh Bridge;
- Bcharre interchange (with an-



nex number 1);

- Bahsas-Kousba road (with annex number 1);
- Rehabilitation of Beit el Faqs-Karsita-Sahet Nemrin road;
- Rehabilitation of Jeita-Ouyoun el Siman road;
- Grubbing of the Monjez-Aboudieh road (13 km);
- Grubbing of the Dae'el-Bejdarfel road within Batroun-Dae'el road (with annex number 1);
- Repair of Saadiyat-Ain el Hor road;
- Repair of Joun-Zaarouriyeh-Zaytouniyeh road (with annex number 1).
- Road works in Hebarieh-Chebbaa and Zaghla-Chouaya-Chebbaa;
- Expansion and renovation of Amchit-Maifouq road (with annexes 1 and 2);

In the context of Sir el Dannieh-Jbab el Homor-Hermel road project:

- The Sir ed Dannieh-Jbab el Homor road;
- Execution of Jbab el Homor-Hermel road;
- Execution of Sir ed Dannieh-Bqarsouna-Qarsita.

4- Main contracts awarded during 2014

In the context of Beirut-Damascus (Masnaa) Road:

- Conducting geotechnical surveys necessary to study the repairs of landslides in Jdeita, Bouarej, Mrayjat, rmatieh alongside the Arab Highway, Mdayrej-Taanyel Section.
- Development of detailed studies and the tender document to outsource the renovation of the old Damascus road in Hazmieh completing the Hazmieh connector works.

In the context of the coastal road project:

- Renovation and supervision works of a section of Maghdouche road completing Phase of Sidon coastal road, located between Siniq Bridge and the interchange located at the intersection of the South Highway with this road;

- Topographic surveys pertaining to the highway stretching from Khalde to Dbayeh and preparation of traffic study pertaining to interchanges connecting the highway with main roads; Elaboration of a preliminary study and assessment of needed documents for the issuance of acquisitions decree related to this highway.

In the context of Metn rapid highway:

- Updating of detailed studies and tender document pertaining to Mar Chaaia-Aatchaneh- Ain Alaq connector, in the context of the project on the renovation and expansion of the Sa'adiyat – Ain el Hor road;

- Preparation of detailed studies and tender document pertaining to the renovation of the road of Ain el Hor – Daraya- A'anout – Za'arouriyeh bifurcation,

In the context of the project on the renovation and expansion of Ehmej-Laqlouq road

- Preparation of the necessary studies and the tender document pertaining to the completion of the renovation of Ehmej-Laqlouq road.

In the context of Aamchit –Tannourine road

- Construction of new connectors connected with Aamchit – Tannourine road.

In the context of Beirut northern entrance:

- Supervision of the expansion of a section of Beirut-Tripoli highway extending from Karantina Bridge towards Charles Helou Station for Travel and Transport;

In the context of the Beirut Urban Transportation Development:

- Preparation of the detailed studies, the tender document and the acquisitions file pertaining

ing to the construction of two separate elevated access and exit roads for Jal El Dib and Antelias on the Beirut-Tripoli Highway.

5- Main projects under preparation for 2015-2017

- Tripoli East Highway project (Bahsas-Badaoui);
- Completion of the South highway;
- Mdeirej (Hamana)-Jisr el Namliye (Bouerij) section located on Beirut-Damascus road (Masnaa);
- Construction of a road between Jamhour and Baalchmay (12.7 km) (Arab highway);
- Construction of Hadath-De-kweneh road (6.2 km) (Beirut ring road);
- Ain Alaq-Bteghrine road within Metn rapid highway project;
- Mar Chayya – Aatchaneh – Ain Alaq road within Metn rapid highway project;
- The Galerie Semaan intersection;
- Tunnel and bridge near Ministry of Resources;
- Execution of Sir interchange;
- Construction of Beit Ayoub-Fnaideq road;
- Jounieh – Bkerke – Harissa road;
- Bqerqasha conversion;
- Cedars road;
- Ghazir-Jdeidet Ghazir road;
- Expansion and rehabilitation of Mayrouba - Nahr el Dahab - Jouret el Termos – Hadchat - Yahchouch road;
- Renovation and expansion of coastal road between Nahr el Kalb and Tabarja;
- Darou'n – Harissa road;
- Haret Sakhr – Darou'n road;
- Main intersections on Jeita – Faraya road (Jeita-Sheile-Bal-loune-Daraya-Ajaltoun);
- Rehabilitation of Jbeil – Anaya road;
- Completion of Batroun-Tannourine road;
- Completion of Bir el Hith-Kar-taba road;
- Arab Highway, Badaoui-Aaboudiye section.



Major contracts awarded during 2014

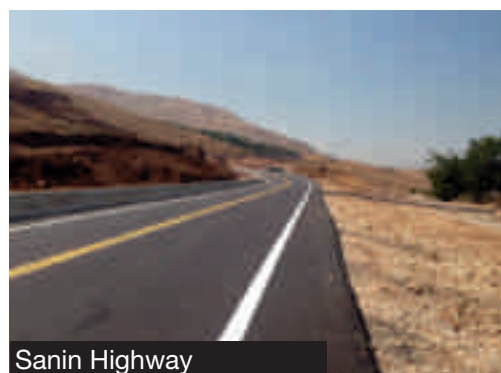
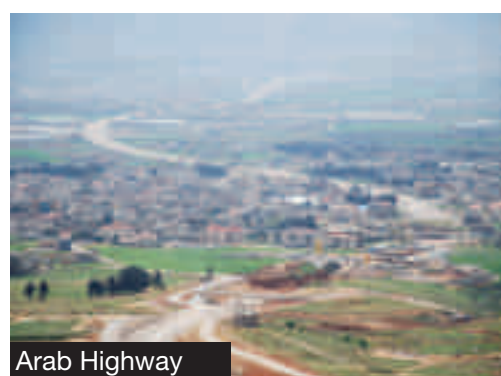
Project	Contract amount (USD)	Source of funding	Commencement Date	Scheduled completion
Within the framework of Beirut-Damascus Road (Masnaa)				
Conducting geotechnical surveys necessary to study the repairs of landslides in Jdeita, Bouarej, Mrayjat, rmatieh alongside the Arab Highway, Mdayrej-Taanyel Section	1,033,716	Program Law	Aug-14	Aug-15
Preparation of the detailed studies, the tender document and the land acquisition file pertaining to the construction of two separate elevated access and exit roads for Jal El Dib and Antelias on the Beirut-Tripoli Highway	55,000	CDR	Aug-14	Aug-15
Within the framework of the coastal road				
Renovation and supervision works of a section of Maghdouche road completing Phase V of Sidon coastal road, located between Siniq Bridge and the interchange located at the intersection of the South Highway with this road;	733,759	Program Law	May-15	Oct-14
Topographic surveys pertaining to the highway stretching from Khalde to Dbayeh and preparation of traffic study pertaining to interchanges connecting the highway with main roads; Elaboration of a preliminary study and assessment of needed documents for the issuance of land acquisitions decree required for this highway	450,000	Program Law	Feb-14	Nov-14
Within the framework of Metn rapid highway				
Updating of detailed studies and tender document pertaining to Mar Chaaya-Aatchaneh- Ain Alaq connector	88,000	CDR	Dec-14	Feb-15
Within the framework of the project on the renovation and expansion of the Sa'adiyat – Ain el Hor road				
Updating of detailed studies and tender document pertaining to the renovation of Ain el Hor - Daraya – Anout – Zaarouriyeh bifurcation	121,000	CDR	Oct-14	Feb-15
Within the framework of renovation and expansion of Ehmej-Laqlouq Road				
Preparation of necessary studies and tender document pertaining to the completion of Ehmej road renovations and repairs	132,000	CDR	Nov-14	May-15
Within the framework of renovation and expansion of Amchit-Tannourine Road				
Site works to construct new road connectors connected with Amchit-Tannourine road	26,290,000	CDR	Mar-14	Apr-15
Within the framework of Beirut's northern entrance				
Supervision of the expansion of a section of Beirut-Tripoli highway extending from Karantina Bridge towards Charles Helou Station for Travel and Transport	322,959	Municipality of Beirut	Mar-14	Aug-15

Project	Contract amount (USD)	Source of funding	Commencement Date	Scheduled completion
Within the framework of Beirut's northern entrance				
Elaboration of a study to modify the configuration of the ring road encircling Beirut city, Hadath-Laylake-Tahwit el Ghadir-Borj el Brajne section	126,500	CDR	22/1/2013	23/7/2013
Within the framework of Beirut Urban Transportation Development				
Preparation of the detailed studies, the tender document and the acquisitions file pertaining to the construction of two separate elevated access and exit roads for Jal El Dib and Antelias on the Beirut-Tripoli Highway	356,400	CDR	Sep-14	Jan-15

Major projects in progress 2015 - 2017

Project	Approximate amount (USD)	Source of funding	Expected start	Expected execution date
East ring road of Tripoli (from extending from Bohsas to Badaoui)	100,000,000	Islamic Bank for Development	Sep-14	Sep-18
Completion of South highway (until Tyre entrance)	35,000,000	Proposed to the Saudi Fund for Development	Mar-15	Mar-17
Mdeirej (Hamana)-Jisr el Namliye (Bwerij) on Beirut-Damascus road (Masnaa)	45,000,000	Saudi Fund for Development	Jan-15	Feb-18
Construction of a road between Jamhour and Baalechmey (12.7 km) (Arab highway)	300,000,000	Proposed to the World Bank	Dec-15	Dec-18
Construction of Hadath-Dekweneh road (6.2 km) (Beirut ring road)	250,000,000	Proposed to the World Bank	Dec-15	Dec-18
Galerie Semaan intersection	10,000,000	World Bank	Dec-15	Dec-17
Construction of Sir road	30,000,000	Islamic Bank for Development	Sep-15	Sep-17
Construction of Beit Ayoub-Fnaideq road	12,000,000	Saudi Fund for Development/ Saudi Reconstruction Grant	Sep-15	Sep-17
Ain Alaq-Bteghrine road, from Metn rapid highway project	55,000,000	Law program of Public Works Ministry 326/2001	Jul-15	Jul-17
Safety and landslide repairs in Biyakout	3,500,000	Public Budget reserves	Jun-15	Jun-16
Bkerkasha interchange	10,000,000	Islamic Bank for Development	Sep-15	Sep-17
Cedars road	15,000,000	Law program of Ministry of Public Works 326/2001	Sep-15	Sep-17
Ghazir-Jdeidet Ghazir road	6,000,000	Law program of Ministry of Public Works 326/2001	Sep-15	Mar-16
Expansion and renovation of Mayrouba-Nahr el Dahab-Jouret el Termos-Hadchat-Yahchouch road	20,000,000	Law program of Ministry of Public Works 326/2001	Sep-15	Sep-17

Project	Approximate amount (USD)	Source of funding	Expected start	Expected execution date
Renovation of Haret Sakhr-Daroun road	6,000,000	Proposed to the Saudi Fund for Development	Mar-15	Mar-17
Daroun-Harissa road	7,000,000	Proposed to the Saudi Fund for Development	Mar-16	Mar-18
Main intersections on Jeita-Faraya road (Jeita-Sheile-Balloune-Daraya-Ajaltoun)	12,000,000	Proposed to the Saudi Fund for Development	Mar-17	Mar-19
Renovation of Jbeil-Aanaya road	12,000,000	Proposed to the Saudi Fund for Development	Mar-17	Mar-19
Arab Highway Badaoui-Aaboudiyeh section	270,000,000	Local funding Program Law 246	Apr-16	Dec-19



TRANSPORTATION

Maritime Transport

1- Overview of the maritime sector

The major implementing contracts awarded for the development of Beirut and Tripoli ports, financed through foreign loans, were supervised by the relevant port administrations. The total value of contracts reached about US \$175 million, and most of their works are completed. The government will focus its efforts during the next phase on developing and extending Tripoli port to become a maritime opening for transit ships towards Iraq.

2- Main achievements for 1992 - 2014

Renovation and expansion of Beirut Port:

This project comprised the dredging and rehabilitation of Basins No. 1, 2 and 3, in addition to the completion of Basin No. 4 to be used as a container terminal, as well as the achievement of related breakwater. The contract was awarded to the conglomerate group Entre Canales/Cubiertas and work has started in the beginning of 1997. Beirut Port Authority received technical assistance covering overall supervision of the design from Marseille Port Authority, while supervision of the works was entrusted to Dar al Handasah (Shaer and Partners). The cost of the project amounted to US\$91.1 million, funded in part by a loan from the European Investment Bank (45 million Euro), while Beirut Port Authority covered the remaining amounts from port revenues.

Subsequently, the Beirut Port Authority awarded a contract for the construction of the first

phase of Basin No. 5. The 600m long and 15m deep quay will be used as a container terminal. The total cost is estimated at approximately US \$50 million, auto-financed by the Beirut Port Authority revenues.

The Beirut Port Authority (interim administration for operating and exploiting Beirut Port) launched a call for tenders in mid 2004 for the management and operation of the port container station, after the administration completed the equipping of the station through the purchase and installation of the main equipment, and thus elaborating the necessary operational terms and conditions.

In August 2004, the contract was signed with the winning bidder (a joint venture of the British MERSEY (MDHC) and the American (IMA). The company started its actual activities at Beirut Port on 14/12/2004 under the name of Beirut International Port Management and the volume of work is expected to exceed that of 2005 of 500 thousand TEU units.

Renovation and Modernization of Tripoli port:

In order to ensure navigational safety, dredging works and removal of sediment and accumulated debris in the commercial basin and entrance channel started during autumn 1997. Moreover, the wrecks of five sunken vessels were lifted and the basin was dredged to a depth of 10m at a cost of US\$ 2 million.

The government commissioned the French consulting firm Sogreah to prepare a master plan for the development of Tripoli Port (financed by the French-Lebanese protocol). The master plan has been completed today, comprising of:

- Increasing the depth of the entrance channel from 10 to 13

meters

- Constructing a 600m long quay extending from the existing port towards Abu Ali river

- Constructing an external breakwater (1000 meters) and completion of the construction of the northern breakwater near Abu Ali River.

As a first step, site works started in 2001 on deepening the basin and the entrance channel at a cost of approximately US\$ 20 million.

Development of Tripoli Port Project:

In order to implement the Tripoli Port Master Plan, the Marseille Port Administration completed the feasibility study for the expansion of Tripoli Port and the European investment bank approved a loan of 45 million Euro to finance the expansion works of this port. These works have been divided into two lots:

Lot 1: Comprises the expansion works of the temporary road for the existing main breakwater and extending both the existing main and secondary breakwaters. The works on this lot were awarded in April 2004, with an approximate amount of US\$ 23 million of Jan de Nul/Hydro-mar joint venture. The supervision contract awarded to these works was funded by Tripoli Port revenues.

Lot 2: Comprises the construction works of a new 600m long quay, excavation and deepening of the port basin to accommodate ships requiring up to 15 meters of depth to pass. Lot 2 works have been carried out by China Harbour Engineering Company, funded by Tripoli port resources, and that after reaching an agreement between the contractor and Tripoli port authorities.

Transformation of the Commercial Port in Tyre into a Tourist Port:

A feasibility study for converting



the commercial port of Tyre into a tourism port is completed.

Tourist Port in Jounieh:

A feasibility study was completed to assess and evaluate the ecological impact of the construction of a tourist port in Jounieh.

3- Main contracts signed in 2014

Development of studies and tender document pertaining to the dredge and fill project aimed at filling marine areas that will accommodate an economic zone in the Port of Tripoli.

4- Main projects under preparation for 2013 - 2017

Tourist port in Tyre

Following the completion of the feasibility study pertaining to the conversion of the Commercial Port of Tyre into a tourism port, the relevant detailed studies are expected to be outsourced as a preparatory step for implementation.

Tourist port in Jounieh

Following the completion of the feasibility study and the environment impact assessment of the planned Jounieh Tourist Port, the relevant detailed studies are expected to be outsourced as a preparatory step for implementation.

Tripoli Port

Dredge and Fill project aimed at filling marine areas to accommodate an Economic Zone at the Port of Tripoli.



Arab Highway

TRANSPORTATION

Air Transport

Overview of the Air Transport Sector

The Beirut International Airport Master Plan aimed at increasing the annual passenger capacity to 6 million yearly, and that as a first phase. The capacity of the airport is expected to increase gradually to 16 million passengers yearly by 2035.

1- Main achievements during 1992 - 2014

Rafic Hariri International Airport Phase 1 of the project included the construction of a new passenger terminal and two new runways: one to the east of the existing runway, and the other on land reclaimed from the sea, and that in order to divert flight from the skies of the capital. As a result of these works, the airport is now able to receive about thirty planes simultaneously, stationed either at the embarkation gates or in the aircraft parking yards.

Works started in 1994 and are now completed; and some additional works are currently underway. Works on Phase 1 of the passenger terminal is complete and was put in service in 1998. Phase 2 of the passenger terminal has been completed and increased the passenger capacity to 6 million per year. At the end of January 2000, various facilities, including two additional luggage conveyors were built, and the works were completed on June 30, 2000. The west runway was put in service during 2001.

The works completed in other parts of the airport are:

- Radar building: works completed in September 1996
- Civil Aviation Security Center: works completed in October 1996
- Civil Aviation Maintenance building: works completed in June 1997
- Fire and Rescue Training building: works completed in July 1997
- Fire Station for Land Service: works completed in July 1997
- Automatic Sorting Post Office: works completed in November 1997
- Power Station building: works completed in December 1997
- Infrastructure for passenger terminal and utilities building (electricity, water, main and internal roads) has been put in service in the beginning of 1998. The west loop leading to passenger terminal was completed in February 2000
- Two main water reservoirs and towers are now effectively in service
- Additional buildings and airport guard and security buildings have been handed to Airport Authorities
- Two tunnels in Ouzai, under the west runway were opened to traffic in December 1997
- Ouzai-Khaldeh interchange at Costa Brava was opened to traffic in December 1997. Khaldeh interchange was open to traffic in September 1999 and the link with old Saida road was completed in December 1999
- Embankment protection works for Ouzai road were completed during 2000
- Car parking and aircraft refueling facilities were completed on the basis of a concession (BOT). Moreover, various contracts for consultancy services or supply of aeronautical equipment have

been awarded (funding through French-Lebanese protocol)

- Consultancy services for modernizing Civil Aviation Administration
- Training equipment for the Civil Aviation Security Center (four contracts)
- Meteorological equipment (contracts for Phases 1 and 2)
- Construction of a VIP pavilion in March 2002
- VIP lounge (public flights) to be delivered soon
- Landscaping works of the VIP pavilion
- Routine periodic tests of air navigational simulator equipments (maintenance and operations)
- Consultancy services in the arbitration case related to the rehabilitation and development of Beirut International Airport
- Project for improving Maritime Protection and building a quay for the rescue station boats for the new western runway of the airport
- Providing an information system for air navigation with appendixes 1, 2 and 3
- Operation and maintenance service of the new building and auxiliary structures in Rafic Hariri International Airport with appendixes 1 and B, in addition to supervision tasks
- Supervision services related to the rehabilitation of the radar control and surveillance system at Rafic Hariri International Airport
- Geophysical surveys of the new eastern runway area of Beirut International Airport
- Upgrading works of the surrounding fencing of Beirut International Airport.
- Operation and maintenance services of the new building and auxiliary structures in Rafic Hariri International Airport with appendixes D, E, F, G, in addition to supervision tasks.
- Routine periodic tests of air



navigational simulator equipments in the airport with appendixes 1/2/3/4 and 5.

- Supervision of operations and maintenance of Rafic Hariri International Airport in Beirut facilities and equipments until 30/6/2010.
- Supervision of remaining external works of civil works execution project of VIP pavilion
- public flights and annexes in Rafic Hariri International Airport in Beirut.
- Prepare detailed artistic, economic, design feasibility studies for projects included in the development program of Rafic Hariri International Airport in Beirut.
- Supervision duties related to the rehabilitation of the airport radar control and surveillance systems of Beirut International Airport
- Supervision of operations and maintenance of facilities and airport equipment
- Financial and engineering assessment of the civil works of the VIP building
- Rehabilitation of the asphalt pavement of the aircraft corridor (M) in the section parallel to the general aviation area of Beirut International Airport
- Completion of works for geophysical surveys of eastern runway
- Rehabilitation of Beirut International Airport radar control and surveillance systems (Annex No.1)
- Supervision duties related to the rehabilitation of the airport radar control and surveillance systems of Beirut International Airport
- Supervision of operations and maintenance of facilities and airport equipment
- Operation and maintenance of the new terminal building and associated facilities at Beirut International Airport (Appendix C)
- Preparation of a complete file to award operation and maintenance services for facilities and airport equipment
- Preparation of a tender docu-

ment for works on the development of the control and monitoring system specific for lighting the runway and public corridors of the airport

- Transfer light supply of western runway 35/17 from the old inverter to the on-going power generator specific to the maritime runway 34/16 in Rafic Hariri International Airport
- Remaining works regarding implementation project of civil works on VIP lounge – public flights and its annexes in Rafic Hariri International Airport
- Rehabilitation and modernization of AMSS in Rafic Hariri International Airport
- Development of the control and monitoring system specific for lighting the runway and public corridors of the airport
- Support works for Ghadir through open-air digging in the airport
- Operation and maintenance of the buildings and facilities of the Rafic Hariri International Airport
- Reconciliation Contract.

2- Main contracts awarded in 2014

A site works and a site supervision contract was awarded to renovate the following sections of the Beirut International Airport:

- o The tarmacs and water evacuation canals
- o The electricity network in the cargo building, and
- o The TMA park.

3- Work progress during 2014 on contracts signed before 2014

The operation and maintenance services of the new building and auxiliary structures of Beirut International Airport (appendix G) are underway, along with the supervision of these services.

Projects that are underway:

- Technical support during the period of implementation and supervision of a) the transfer of light supply of the western run-

way 35/17 from the old inverter to the uninterrupted power generator of the maritime runway 34/16 and of b) the system that commands and monitors the illumination of Beirut International Airport runways and taxiways.

- The project on the introduction of additional computerized services at the data exchange center of Beirut International Airport.
- The project on the system that commands and monitors the illumination of runways and taxiways.
- The transfer of light supply of the old western runway 35/17 from the old inverter to the uninterrupted power generator of the maritime runway 34/16.

4- Main projects under preparation in the horizon of 2015-2017

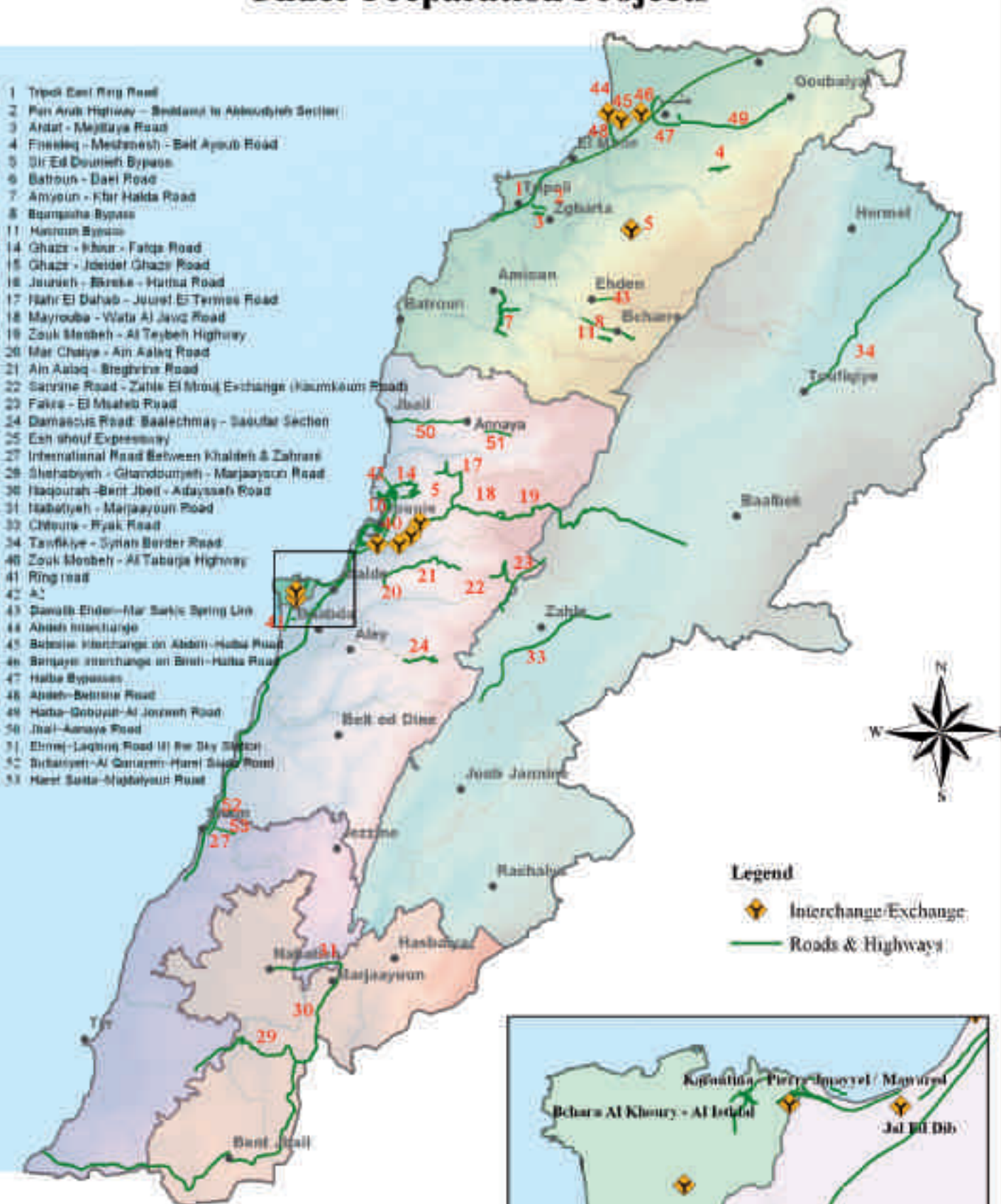
Currently the following contracts are under preparation:

- Civil works for the renovation of the runways and taxiways at Rafic Hariri International Airport
- In collaboration with the Ministry of Public Works and transports, the CDR will start to review the master plan of Rafic Hariri International Airport, in light of the past years developments.



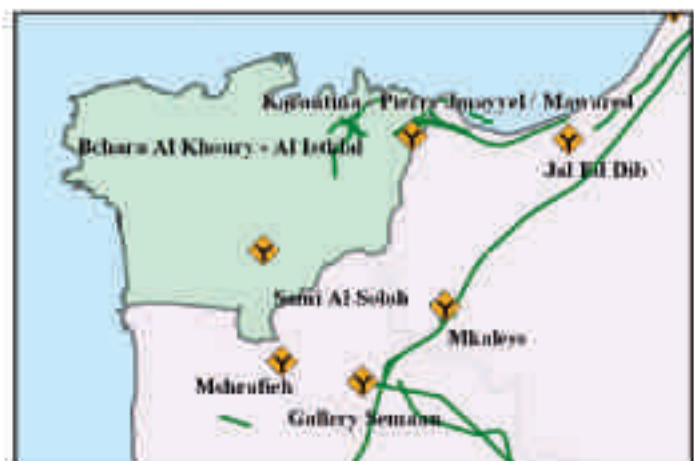
Roads & Highways Under Preparation Projects

- 1 Tripoli East Ring Road
- 2 Pan Arab Highway - Bekdash to Akkoudiyeh Section
- 3 Andat - Majdaya Road
- 4 Ennebel - Metdash - Belt Ayoub Road
- 5 Sir Ed Dounieh Bypass
- 6 Batroun - Dael Road
- 7 Amjeun - Kfar Hadda Road
- 8 Bamsheh Bypass
- 11 Akroun Bypass
- 14 Ghaz - Khour - Falqa Road
- 15 Ghaz - Jdeideh Ghaz Road
- 16 Jounieh - Berek - Hadda Road
- 17 Hahr El Dahab - Jouni El Termes Road
- 18 Mayrouba - Wata Al Jawz Road
- 19 Zouk Mosbeh - Al Taybeh Highway
- 20 Mar Chaya - Am Akad Road
- 21 Ain Akad - Beggine Road
- 22 Sarrine Road - Zahle El Mouj Exchange (Haumkeun Road)
- 23 Fakra - El Mshah Road
- 24 Damascus Road - Baalechmay - Saouta Section
- 25 Esh shouf Expressway
- 27 International Road Between Khalden & Zahra
- 28 Shehabiyeh - Ghadburyeh - Marjayoun Road
- 30 Haqourah - Bait Jbel - Akayssah Road
- 31 Nabatiyeh - Marjayoun Road
- 32 Choura - Ryak Road
- 34 Tawfikye - Syrian Border Road
- 40 Zouk Mosbeh - Al Tabara Highway
- 41 Ring road
- 42 Al
- 43 Sawab-Ender-Mar Sakic Spring Unit
- 44 Akdash Interchange
- 45 Bateine Interchange on Akdash-Hadda Road
- 46 Bamsheh Interchange on Bait-Hadda Road
- 47 Hadda Bypasses
- 48 Akdash-Battine Road
- 49 Hadda-Gebayeh-Al Jounieh Road
- 50 Jbel-Kunaya Road
- 51 Ebnay-Laqine Road (Rw Sky Bridge)
- 52 Baitanyeh-Al Qanaym-Hamir-Sakic Road
- 53 Kfar Sakic-Nabatiyeh Road



Legend

- Interchange/Exchange
- Roads & Highways



Roads & Highways Completed & Ongoing Projects

- 1 Tripoli - B. B. - 21 Highway
- 2 Tripoli - B. B. - 21 Highway
- 3 Tripoli - B. B. Road
- 4 Tripoli - B. B. - 21 Highway
- 5 Tripoli - B. B. - 21 Highway
- 6 Tripoli - B. B. - 21 Highway
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- 60 Tripoli - B. B. - 21 Highway
- 61 Tripoli - B. B. - 21 Highway



Legend

- ◆ Interchange, Ongoing
- ◆ Interchange, Completed

Roads & Highways

- Completed
- Ongoing



EDUCATION AND HIGHER EDUCATION

The Lebanese government education and higher education action plan aimed to “provide a seat in elementary school for every Lebanese school-aged child”, in line with the Dakar Framework for Action: “Education for All”, adopted by the World Education Forum Dakar, Senegal, on 26-28 April 2000. After the Ministry of Education and Higher Education (MEHE) has laid the foundations for the education sector reforms, the plan was expanded beyond the quantitative or qualitative dimension of “school seats” to a broader vision of education available on the basis of equal opportunity, education that has good quality and contributes to social integration and to economic development.

Following the July 2006 war, the MEHE conducted a study to assess the impact of the war on the education sector in partnership with the World Bank and the UNESCO. Subsequently, an education reform process was initiated. Within this context, the “National Education Strategy in Lebanon” was prepared by the “Lebanese Association for Educational Studies” by the end of 2006 and presented to the Council of Ministers for adoption in the beginning of 2008. This was followed by a larger and broader action plan for the Ministry, aimed at promoting compulsory basic quality education until the age of 15.

The pillars of the National Educational Strategy:

Education Available on the Basis of Equal Opportunity:

Education available to children aged 3- 5; public education accessible to this age group.

Compulsory education for children until the age of 15. The state should give access to public education for all, based

on the right of every individual to quality education. Education should give everyone, including learners with special needs, equal opportunity for enrollment, for educational continuation and for success;

Quality education that contributes to building a knowledge society:

Education characterized by the high quality of its curricula, institutions, and outcomes; an education that is aligned with national and international standards.

Education oriented towards the development of knowledge, skills, and attitudes needed for handling information and the intensive use of Information and Communication Technology (ICT).

Education that develops the general education of individuals and provides them with critical thinking skills and moral reasoning, enabling them to live and work in a modern, changing society and to become lifelong learners.

Education that contributes to social integration:

Education that develops citizenship in its three dimensions: National identity, civic participation, and human partnership.

Education that contributes to social cohesion and provides learners with the knowledge, skills, and attitudes needed for living together in a diverse society.

Education that contributes to economic development:

Education that contributes to the development of human capital.

Education that provides qualitatively and quantitatively competent work force to meet the needs of the Lebanese labor market, and that can compete in free job markets.

- Modernization of the Minis-

try and the change to strategic management.

The main challenges within the sector:

- Public education is not providing equal opportunities for every student in school enrollment, school attendance and success. A large percentage of children aged 3-5 remain outside kindergartens, especially those aged 3 and those with special needs. Public education does not provide enough opportunities for children to join kindergartens that meet minimum quality requirements especially in areas outside Beirut and Mount Lebanon. Enrollment in elementary education stands at near saturation. But this percentage drops to (68%) in intermediate education. There are serious problems with educational continuation that manifest themselves in the high percentages of dropout and class repetition and retardation. There are significant differences among the various districts in favor of Beirut and Mount Lebanon; there are also significant differences between the public and private sectors, in favor of the latter. There is inequality in opportunity of success for passing official examinations between private and public educational sectors. The educational system does not provide enough measures that cater to students with special needs. The enrollment rate of people with special needs in the secondary cycle is acceptable, these rates aren't however consistent across Lebanese regions.

- Poor education quality that needs improvement in order to contribute to the creation of a knowledge society:

The Pre-school education shows many weaknesses as evidenced in: 1) the lack of coherence in its curricula; 2) problems in the implementation of the cur-



ricula; 3) the low percentage of holders of appropriate degrees for teaching in this cycle; 4) inadequate school buildings and educational aids in most cases; 5) the school climate's lack of alignment with modern trends of pre-school education; and 6) the inadequacy of both the school administration and the central administration. These weaknesses are more acute in public and free private kindergartens. In addition, the curricula of the other cycles need continuous development on the basis of continuous assessment. Moreover, there is no single independent authority for developing and monitoring textbooks in accordance with pre-determined criteria. Elementary education in public schools faces serious problems when it comes to the qualifications of its teachers as evidenced by: 1) the high percentage of teachers whose education has stopped at the Baccalaureate level or even before; 2) contracting teachers with university degree on a discretionary basis and without having any educational preparation; and 3) The lack of a system of professional development. Furthermore, secondary education faces other serious problems with teachers qualifications related to: 1) contracting of individuals to teaching positions on a discretionary basis and without having educational preparation; 2) appointment of full-time teachers on a discretionary basis and offering them a short 'professional preparation' session; and Public schools face the problem of inadequate buildings, facilities and educational provisions as it relates to their availability, suitability, quality, and use in teaching and learning.

- Modernizing the ministry and shifting to strategic management: The MEHE has not been able to draw the necessary frameworks for effectively managing education in Lebanon i.e: policies, plans and strategies, standards and specifications,

appropriate systems for monitoring and supervision, quality assurance, and means of supporting cooperation within the education community and between this society and other social institution. The management of education suffers also from: scattered functions, conflict among the units which perform these functions and occasional lack of communication among them, lagging behind the educational developments in Lebanon and contemporary trends in educational management. The MEHE is developing management information systems with a view to modernizing and automating the Ministry.

A vision for the future

Promotion of equal access to quality education for all Lebanese children in order to build a knowledge-based society, and strengthen social integration and economic development

Achievements in education (1992-2014)

- The Government of Lebanon through the Ministry of Education and Higher Education (MEHE) put in place in 1994 the Education Sector Development Plan, which was followed by the formulation of new public education curricula (finalized by the end of 2000) issued by a decree. Afterwards, the textbooks were accordingly produced and the teachers were trained on the new curriculum applied in 2000-2001. The first official examinations held according to these curricula took place in 2004.
- The Education Sector Development Plan was completed in the beginning of 2007; it was presented to the Council of Ministers for adoption in 2008.
- A new structure that integrates technology was elaborated for the Ministry of Education and was approved by all the departments within the Ministry.
- A draft law that rises up the

age of compulsory education to the age of 15 (instead of 12) was finalized and still needs ratification of the Parliament.

- A grant from the Kingdom of Saudi Arabia offered three years of free public basic schooling and textbooks (2006, 2007 and 2008).

- A training program on "developing leadership skills" was completed; it included preparing the trainer guide and training courses. It was carried out by the Ministry in 420 schools and then the program was institutionalized through the Faculty of Education at the Lebanese University and it became a continuous program.

- The MEHE was chosen to be the first public body to implement the "performance based budget" preparation system launched by the Ministry of Finance in 2009.

- Improving and modernizing the performance of educational management and the integration of EMIS (Educational Management Information System):

- o The ministry succeeded in modernizing the official exams and they were applied in the sessions of the academic year 2007-2008.

- o 1388 schools were equipped each with 2 computers and related terminals to link these schools to the National Information Network for Education under construction.

- o The MEHE signed a cooperation agreement with the Ministry of Defense - Geographical Affairs Bureau to integrate a GIS w to the MEHE.

- The educational development project funded by a World Bank loan was completed in December 2009, after achieving three of its four stated objectives: a) constructing, equipping and operating 11 public schools, b) preparing and adopting an



educational strategy and c) restructuring and revitalizing the MEHE. Given the success of the project, the World Bank granted the MEHE one million US dollars to support the development of a new educational project.

- During 2010 and 2011, in order to put the Education Sector Development Plan into effect, the MEHE combined its efforts with the Educational Center, external funding sources including the World Bank, the European Union, UNDP, UNICEF and USAID which led to following projects:

1- D-RASATI program: (US\$ 75 million 5-year grant by the USAID): it aims at enhancing student achievement in Lebanese public schools by training English teachers, developing extra-curricular activities, providing schools with ICT equipment and training, developing school leadership and building the capacity and tools necessary to support school improvement planning and finally increasing community and parental involvement. The first phase of the program was completed between 2011 and 2013, and the following has been accomplished to date:

- Renovation of 183 public schools and 6 training centers.
- Field survey of the infrastructure of 1282 public schools.
- Provision of scientific laboratory instruments and supplies to 238 public high schools and 6 training centers.
- Launching of the National ICT Strategy Action Plan for Education and putting in place procedural implementation plans.
- Providing training to 170 observers (from the Educational Center, Educational Inspection, Guidance and Counseling, Faculty of Pedagogy at the Lebanese University) on Class Observation Tools for teacher evaluation.

- A train-the-trainers session was conducted on teaching methods.

- Training teachers to master the English language: A diagnostic test was carried out to determine the level of English proficiency of English teachers and the Mathematics and Science teachers in English (4061 teachers). Then, the implementing agency entity was selected to provide English language training for teachers to obtain internationally acknowledged certification. The criteria for choosing directors in-service to participate in the Leadership Development Program were laid down (August 2012). A list with the names of qualified directors was drawn, in accordance with the set criteria, for all Mohafazat (December 2012).

- With regard to the School Improvement Program: Criteria were laid down for schools which can participate in this program (August 2012). A clarification document about the program, its objectives and its phases was prepared and 20 qualified schools were selected to start this experience. The training material for the School Improvement Program was also put in place.

2- Second Education Development Project (EDP-II) – financed by the World Bank (USD 40 million loan):

- The EDP aims at improving the teaching quality and the learning environment in public schools and preschools, strengthening the pedagogical capacity and the policy, planning and governance capacity of the MEHE.

- The loan became effective on November 29th 2012.

- All activities of the project's components were aligned, and implementation plans were laid down, alongside the timeframes and estimative costs.

- Committees were designated to plan and monitor the three components of the project.

3- The project on "the Support of Reforms in the Education sector and Public Finance

Department" in partnership with the European Union (7.7 million USD).

- The guidelines for the School Support Project were laid down.

- The School Support Project action plan targeting 50 public schools was laid down.

In August 2012, the contract was signed with the agency implementing the Citizenship Education project. The preliminary report was discussed and the work plan was approved in February 2013.

4- UNDP's Development Project for Technical Support of MEHE:

- Administrative procedures were reviewed and simplified at the examinations department/ educational zones/Public Education Office, in cooperation with OMSAR.

- A study about the current situation was carried out. Draft projects and procedural files for work development were prepared. The project was extended until February 2015.

- In 1992, the CDR started a comprehensive renovation process for all public schools in Lebanon. Moreover it supplied these schools with most of their furniture and equipment. Starting 1996, the CDR rebuilt and equipped 25 public schools destroyed by the war, after it secured the necessary funds. Between 1997 and 2000, the CDR also renovated two teacher training institutions.

- In 1997, the CDR was charged with the rehabilitation and expansion of a group of public schools funded by the budget law 622 /97 to increase their capacity.

- In 2001, the CDR awarded engineering studies pertaining to nearly 90 new public schools. The Council started to award contracts for site works in 2002 and by the end of 2012 works for around 78 schools were awarded, most of which were completed to date, and the CDR supplied the furniture and equipment for a large number of these school. It is noteworthy



that for most of these schools funding was secured by grants and loans in addition to the allocations for the concerned ministry within the abovementioned program law. The sources of the funding were the Islamic Development Bank, the World Bank, the Saudi Fund for Development, the Arab Fund for Economic and Social Development, and South Korea.

- The renovation of schools damaged during the July 2006 war by some donor countries such as Qatar, Iran, UAE, individuals, private sector institutions, or national and international organizations.

- The CDR completed the infrastructure and the concrete slabs to install 37 prefabricated units as schools donated by the Turkish Government to 18 villages in 9 districts most of them for schools severely damaged or destroyed during the July 2006 war.

- The CDR constructed a new building for the MEHE, gathering all its directorates and divisions in one location. The building was constructed in modern way that allowed the Ministry to follow up the progress in technology and IT. After the delivery of the new building to the Ministry, the CDR awarded a maintenance and operation contract that is being renewed when necessary.

- The total aggregate value of the contracts signed by the CDR in the education sector since 1992 until the end of 2014 amounted to US\$ 343,58 million of which US\$ 164,11 million came from foreign sources. Projects executed amounted to US\$ 298.73 million.

Work Progress in 2014 in contracts signed before 2014:

The following sites works were completed in 2014:

- The site works in the schools of Fakiha;
- Repairs and maintenance

in the Syr Public School;
- Repairs and water isolation in School No.8 located on Property No.597 in Zqaq el Blat. In addition, the construction of the final group of schools funded by Saad el Hariri was completed.

Main contracts signed in 2014

The aggregate value of contracts signed by the CDR in the Education sector totaled US\$ 8,947 million in 2014; they included a supervisory contract over site works in the Amchit Public School and site works contracts in the two public schools of Amchit and Lassa, funded by local source. In addition, a consultancy contract funded by the Agence Francaise de Developpement was awarded to develop a draft agreement and put in place reference guide to be used by the project aimed at improving public school enrollment.

The remaining contracts focused mainly on additional site works or price adjustments of previously signed contracts. Furthermore, the operation and maintenance contract pertaining to the new MEHE building was renewed in May 2013 for two additional years. The total cost of the contract amounted to US\$ 2,81 million inclusive of supervision costs. The contract is still active.

Main projects under preparation (2014-2017)

Based on the issuance of the Law approving the additional loan granted by the Kuwait Fund, the construction of Beirut schools that was interrupted due to lack of funding are scheduled to resume.

In 2012, the "Agence Française de Developpement" (AFD) sent many delegations to study the project on the Support of the Public Education sector in Lebanon. One of the delegations

signed a contract with a French consultant to conduct a feasibility study for the construction of 20 public schools in the neediest areas.

After reviewing the study, it has been agreed to extend the list of schools constituting the baseline for selecting the 20 schools, and to complete that list based on the criteria prescribed in the study. At that stage, the preparation of the project was completed. In December 2013, the central administration of AFD in Paris approved to grant a US\$ 45 million loan to "improve public schools reception conditions in Lebanon". This grant covers 3 components, a) establishing and equipping around 20 public schools in the most disadvantaged areas of the Bekaa, Mount Lebanon, and North of Lebanon, b) improving the quality of education by building teachers capacities and c) strengthening the pedagogical frameworks.

The agreement is expected to be referred in 2015 to the Council of Ministers for approval then to the Parliament to be ratified by a draft law.

Projects implemented by other funding sources are underway. Among these are the projects aimed at constructing and equipping schools in the southern suburbs of Beirut funded by the Kingdom of Saudi Arabia. Also fundraising projects are underway to collect funds for the initiation of site works at schools for which studies were outsourced locally.

Major challenges of the vocational and technical education

The major challenges faced by the vocational and technical education sector are the following:

- Absence of a comprehensive system for secondary



education: The current system remains divided into separate tracks, first, between general and technical education and, second, among the specializations in each.

- Although the modernization of the curricula which took place in 2000 is considered a significant step forward, there are several indications of the low quality of vocational and technical education, such as:
 - the low level of students admitted to vocational and technical education;
 - the low level of academic and educational qualifications of the majority of teachers because of lack of in-service training to enable them to be in step with scientific and technical innovations;
 - Quantitative and qualitative insufficiency of necessary technical equipment;
 - the lack of adoption and development of new teaching methods and evaluation techniques;
 - lack of communication between labor market since there is no mechanism to link employers and technical education institutions;
 - the absence of a career guidance system especially for those enrolled in vocational and technical institutions;
 - o Absence of quality criteria and feedback.

Higher technical education faces additional problems that affects its quality as evidenced by:

- the absence of an authority or administration responsible for higher technical education;
- lack of distinction between higher technical education, on the one hand, and secondary technical education, on

the other, with respect to the specifications of the institutions;

- absence of a system of classification of teachers as is the case with university education;
- centralization of official examinations;
- adoption of an inflexible system based on the academic year and on a comprehensive official examination for granting degrees;
- Exclusion of vocational and technical education as a higher education track.

Achievements in vocational and technical education (1992-2014)

- The Vocational and Technical Education sector obtained US\$ 15 million, as part of the first loan granted to Lebanon to implement the "Urgent Rehabilitation Program" proposed by the World Bank in 1993. The CDR a) renovated all vocational and technical schools and institutions then existing, b) equipped such schools with furniture and educational material and supplies, and c) provided the technical assistance needed to manage such institutions.
- The CDR renovated and equipped the facilities of all the central administrations affiliated with the General Directorate of Vocational and Technical Training.
- In 1999, the Council of Ministers approved an emergency plan to take in 2000 additional students in vocational schools; The CDR was selected as the implementing agency of the plan, whereas furniture, equipment and supplies were purchased for vocational schools as well as hotel equipment.
- A plan to develop vocational and technical education was put in place and a consultancy contract was awarded to provide training sessions for the teachers and principals of vocational and technical schools. In addition, to develop vocational

and technical education, a five-year plan was developed to identify the needs of the ministry with respect to buildings, constructions, equipment and training programs according to available economic, demographic and educational data (US\$ 1.26 million).

- The Bir Hassan technical complex (20,000 m²), was built, with a cost of (US\$ 8,13 million), financed by the AFESD. This complex includes the National Pedagogical Institute for Technical Education (IPNET), the Nursing School and the Hospitality School.

- In 2000, programs and curricula were formulated for the vocational and technical education system, they included 23 specialties in Technical Baccalaureate (BT) and 22 specialties in the Technique Supérieure (TS) (US\$ 1.5 million)

- Upon MEHE's request and after the completion of study aimed at identifying the regions' needs, the needed specialties and the capacity of each vocational and technical school across Lebanon, the CDR developed architecture plans for 36 vocational and technical schools to be constructed and equipped at a later stage.

- Between the summer of 2000 and the end of 2010, the CDR had signed contracts to build 27 new vocational and technical schools, which were all completed across the Lebanese regions. This project was funded through loans granted by the Arab Fund, the Islamic Bank, the OPEC Fund and the Kuwaiti Fund. These schools were fully equipped.

- With a financial assistance from the IDB, the CDR purchased instruments for educational workshops related to industrial majors that were offered to 10 vocational and technical schools.

- The equipment of Hermel Vocational School was purchased. The equipment of all the vocational schools con-



structed by the CDR was purchased. Only the Western Syr Vocational School still needs to be equipped. This school is being constructed through a direct financial assistance from the Government of Germany.

- The aggregate value of the contracts signed by the CDR in the vocational and technical education sector, between 1992 and the end of 2014, totaled US\$ 154,11 million of which US\$ 110,12 million were foreign-sourced funding. The estimated value of the achieved projects amounts to US\$ 143,34 million. Work progress in 2014 in contracts signed before 2014 Not applicable.

Main contracts signed in 2014

No contracts were signed by the CDR in the vocational and technical education sector.

Main projects under preparation (2015-2017)

Few vocational and technical schools still need to be built within the framework of the program on Vocational Schools Construction and Equipping assigned to the CDR. The Council will follow up on the construction of a number of vocational schools which were interrupted due to logistic reasons such as the inadequacy of the land or similar reasons.

Major Challenges of The higher education

- Higher education in Lebanon suffers from serious quality problems which emanate from archaic standards in private higher education and from failure to abide by what was issued later, and the absence of structures needed to control quality in private higher education, the absence of national frameworks and structures for quality assurance. In the Lebanese University, quality-related problems are attributed to not adopting a reform project for it, not availing the needed resources, and losing its autonomy in the last decades.

- The spaces for social mix in education in Lebanon have shrunk considerably during the last few years at the levels of university student composition, university teachers associations, student unions, youth organizations, and the professional organization of teachers and educators. This problem is most acute in the Lebanese University and in public education in general.

- The contribution of higher education to geographical mobility is limited, as the general tendency is either for settlement of students within the same region or their mobility from remote regions to specific universities in the Greater Beirut area. Expectations regarding the chances for finding work after graduation confirm these two trends; however, the tendency to seek work outside Lebanon remains greater than the tendency to work in other regions of Lebanon.

- The contribution of higher education to vertical social mobility is limited especially at the Lebanese University. Among the impediments of such mobility are the low quality of education, the existence of specializations that have narrow career options, and the scarcity of financial aid and other forms of students support. This mobility is also hindered by the weak academic mobility between different types of secondary education and different types of graduates.

- The job market for university graduates suffers in both quantity and quality as indicated by unemployment, masked unemployment, and immigration on one hand and the low expectations from university graduates on the other hand. Economically, this problem is the result of 1) slow growth of the Lebanese economy and its inability to create new work opportunities and 2) the laxity of professional standards in many of its sectors. Educationally, this problem is reflected 1) in the

expansion of higher education driven by political and commercial considerations at the expense of the quality of input and of learning outcomes of graduates; 2) not availing databases in education regarding labor market demands; 3) weakness of partnership and communication frameworks between educational institutions and employment institutions, and 4) lack of frameworks and clear efforts to develop fast training certificate programs.

Higher education and technical and vocational education in Lebanon exhibit serious problems in keeping pace with the global work market and in building a competitive workforce. These problems manifest themselves in a number of areas:

- weakness of practical training;
- weakness in general preparation that enables graduates to adapt to innovations;
- weakness in aspects related to production according to international standards;
- weakness in aspects related to initiatives in establishing institutions (entrepreneurship);
- weakness in cooperation programs with international educational and employment in a specific specialization;
- the absence of quality control and quality assurance frameworks based on international standards for technical and applied university specializations;
- not availing information and studies about supply and demand trends for graduates, at the regional and international levels.

The Lebanese University faces several management challenges:

- The limited authority



given of the academicians authority;

- Lack of autonomy;
- Lack of student participation in decision making at the faculty and university levels;
- Weakness of social and professional partnerships with respect to the University's affairs;
- Absence of supporting academic management structures;
- Weakness in the use of means of communication and information ;
- The management staff lacks the necessary modern adequate management skills and specializations;
- Absence of management units for physical and human resources. However, the current organization provides an accepted level of professor's participation in the decision making process.

Achievements in Higher education (1992-2014)

o The CDR carried out renovations at the Faculty of Sciences at the Campuses of the Lebanese University in Hadath (1995) and Fanar (1996); Renovations were also performed at the National Museum (1995) and the different branches of the National Conservatory in Beirut Central District (1995), Sin El Fil (1995) and at the UNESCO Palace (1998). In addition, the Higher Institute of Technology at the Lebanese University and the Faculty of Engineering at Saint Joseph University were provided with the scientific equipment needed.

o The Hariri University Campus in Hadath was constructed, furnished and equipped. The Campus is composed of nine faculties affiliated with the Lebanese University in addition to the Faculty of Sciences (previously renovated), the Industrial Research Institute (IRI) and the annexed

buildings dedicated to various facilities servicing the campus. The nine faculties are: Public Health, Medical Sciences, Institute of Fine Arts, Law and Political Sciences, Pharmacy, Journalism, Literature and Human Sciences and Faculty of Engineering and Fine Arts. In 2004, all buildings and constructions at the Hadath Campus were completed and delivered except for the external site works. The funding of the project was granted by the AFSED and the Islamic Bank at different proportions, in addition to the allocations assigned in the Lebanese University Program Law.

o In the context of this project, a three-year contract was awarded for the operation and maintenance of the Hadath University Campus, at a total cost of US\$ 26,4 million. The CDR also outsourced the supervision of the operation and maintenance of the University Campus.

o The CDR prepared the tender document to purchase equipment for the laboratories of the Faculty of Science at the Lebanese University. After the US\$ 5 million loan agreement has been concluded with the Islamic Bank for Development, a call for tenders was released in 2006 to purchase part of the equipment. Another call for tenders related to the remaining part was released in 2007.

o The CDR also provided the major faculties of the Lebanese University with information technology devices through an Arab Fund grant.

o The Lebanese University Unified Campus in North Lebanon: To date the site works of three faculties out of eight were outsourced, the Faculty of Engineering, the Faculty of Fine Arts and the Faculty of Sciences. The remaining faculties that need to be constructed to complete the campus are: The Faculty of Social Sciences, Faculty of Law and Political Sciences, Faculty of Economics and Business Administration, Faculty of Arts, and

the Faculty of Public Health, in addition to the central library, a conference center, a guest house, an administration building, a central car park, southern car park and sports complex. The amount of the contract of the Faculty of Engineering and the Faculty of Fine Arts amounted to US\$ 50.16 million, funded by a Kuwait Fund Loan. The completion of the construction of the two faculties was scheduled for 2013, but works completion was delayed due to a financial crisis faced by the executing company. As a result, the duration of the project implementation was extended until the end of 2014.

o The aggregate value of the contract related to the Faculty of Sciences totaled US\$ 38.37 million, with a partial funding from the Saudi Fund and works are scheduled for completion in the beginning of 2015.

o The architectural studies related to the construction of an Institute for Applied Sciences and a Teachers' Training Center (TTC) in Bir Hassan were outsourced. After conducting negotiations with the French Development Agency, the Agency's Board of Directors approved to grant a EUR 21 million loan coupled with a EUR 700,000 grant to finance the project. The Council of Ministers approved the grant agreement and referred the loan agreement to the Parliament for ratification.

o The aggregate value of the contracts signed by the CDR in the sector of higher education and culture between 1992 and the end of 2014 totaled US\$ 584,79 million of which US\$ 237.63 million were foreign-sourced funding. The value of the completed projects amounts to US\$ 420,48 million.

Work progress in 2014 in contracts signed before 2014

- A loan agreement was signed with the Islamic Bank, to finance the cost of constructing and equipping of the following facili-



ties:

☐ A Public Health Faculty in the North of Lebanon;

☐ A Public Health Faculty in Fanar;

☐ Part of the Common Parts of the Unified University Campus in the North of Lebanon.

Site works were initiated and are still active.

- A US\$ 220,000 contract was signed to elaborate a feasibility study pertaining to the construction of a university complex in Edde – Byblos.

Main projects under preparation (2015-2017)

- The site works, furnishing, and equipping of the Faculty of Public Health in the North of Lebanon and the Faculty of Public Health in Fanar were outsourced through a loan granted by the Islamic Bank.

- Fundraising to execute the last phase of the Unified University Campus in the North of Lebanon.

- Finally, efforts will be made to issue a Law permitting the construction of the Institute of Applied Sciences, as well as the constructing and equipping of a Teachers' Training Center (TTC) in Bir Hassan, through financial assistance granted by the French Development Agency. The related site works will be subsequently initiated.



Amatour Public School



Amchit Public School



Barja Public School



Antelias Public School



Beirut 80 Public School

Main Contracts signed in 2014

Youth and Sports				
Project	Estimated Value (US\$)	Funding Source	Start Date	Expected date for completion
Formulation of necessary studies pertaining to the construction of new municipal sports field and a parking lot in Property No. 1925 in the Mazraa cadastral region	280,720	Local	24/04/2013	July 6 2013
Total	280,720.00			

Main Projects in preparation 2015-2017

Youth and Sport				
Project	Estimated Value (USD)	Funding Source	Start Date	Expected date for completion
Completion of unfinished site works at Olympic Pool of Naccache - Phase II	4,180,184	Local	Dec-15	Mar-17
Renovation of Tripoli sports field and its conversion into a sports city- Phase I	9,000,000	Local	Dec-15	Dec-16
Rehabilitation of Baalback sports field and its conversion into a sports city	17,000,000	Local	Oct-15	Oct-19
Total	30,180,184			

Main Projects Under Preparation (2015-2017)

Culture and Higher Education				
Project	Estimated Value (US\$)	Funding Source	Start Date	Expected date for completion
Execution of site works at the Faculty of Public Health and a part of the Unified University Campus - University Campus in North-Lebanon	33,825,000	Islamic Bank for Devekopment	Dec-15	Apr-18
Project for the construction of the Faculty of Public Health in the University Campus in Fanar	25,400,000	Islamic Bank for Devekopment	Dec-15	Dec-18
Total	59,225,000			

Main contracts signed in 2014

Culture and Higher Education				
Project	Estimated Value (US\$)	Funding Source	Start Date	Expected date for completion
Elaboration of a feasibility study and preliminary studies related to the construction of a University Campus in Edde-Byblos	220,000	Local	Jan-14	Jan-14
Elaboration of studies and tender documents related to the construction of a public health faculty within the Pierre Gemayel University Campus	990,000	local	Jul-14	Jul-15
Total	1,210,000			

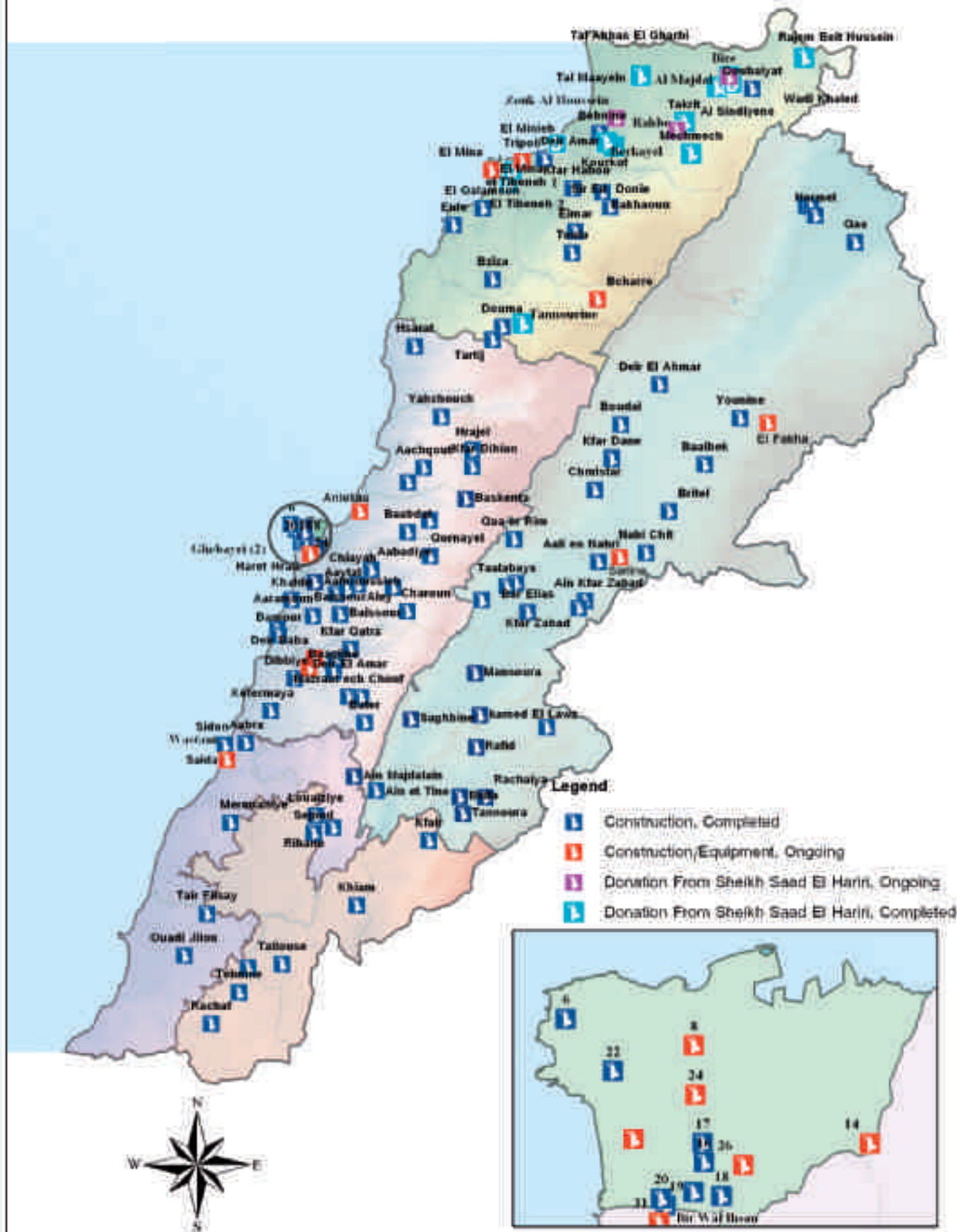
Main Contracts under preparation 2014-2016

Education				
Project	Estimated Value (US \$)	Funding Source	Start Date	Expected date for completion
Works for the construction of a new building for the Dar Moalimin and Moalimat in Bir Hassan and construction of another independent building for the Institute of Applied Sciences	18,000,000	French Development Agency	Sep-15	Sep-18
Construction of School 4 in Mazraa	7,591,800	Kuweit Fund	Sep-15	Dec-17
Construction of schools 2+12 in Msaitbe	8,336,440	Kuweit Fund	Sep-15	Feb-18
Construction of school 13 in Achrafieh	12,422,000	Kuweit Fund	Dec-15	Dec-18
Construction of school in Aamchit	2,127,110	Local	Sep-15	Sep-16
Construction of public school in Sariin	1,350,425	Local	Apr-15	Jul-16
Construction of high school in Hadath	4,475,000	Saudi Grant	Apr-16	Oct-17
Construction of high school in Borj el Barajneh	4,685,000	Saudi Grant	Mar-17	Mar-17
Total	58,987,775			

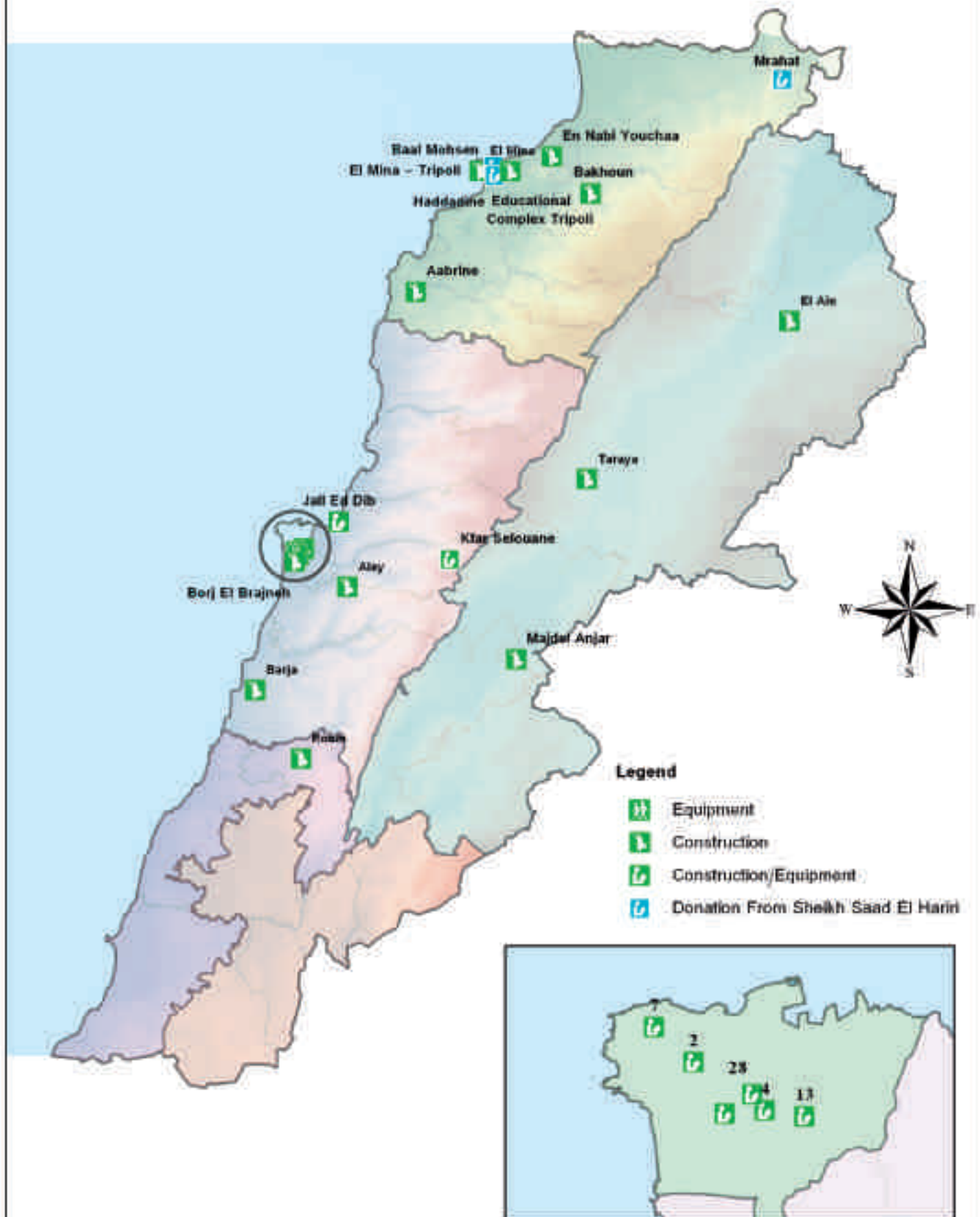
Main Contracts Signed in 2014

Culture and Higher Education				
Project	Estimated Value (US\$)	Funding Source	Start Date	Expected date for completion
Execution of water isolation works in school No.8 located on property No.597 in Zqaq el Blat	115,536	Kuweit Development Fund	Jan-14	Jan-14
Execution of site works to repair the defects of school No.8 located on property No. 597 in Zqaq el Blat	181,025	Kuweit Development Fund	Jan-14	Jan-14
Execution of site works for the construction of Aamchit Public School	116,603	French Development Agency	Jan-14	Jan-14
Execution of site works for the construction of Lassa Public School -Phase I	2,452,307	Local	Jan-14	Jan-16
Elaboration of a study related to preliminary environment assessment of a project to construct a Teachers' Training Center (TTC) in Bir Hassan and construct an independent facility for the Applied Sciences Institute	576,778	Local	Jan-14	Jan-16
Project for the construction and equipping of an educational complex in Tripoli including a pilot school and Teachers training center (TTC)	15,689	Local	Aug-14	Aug-14
Total	4,612,990	Local	Jan-14	Jan-16
	8,070,928.08			

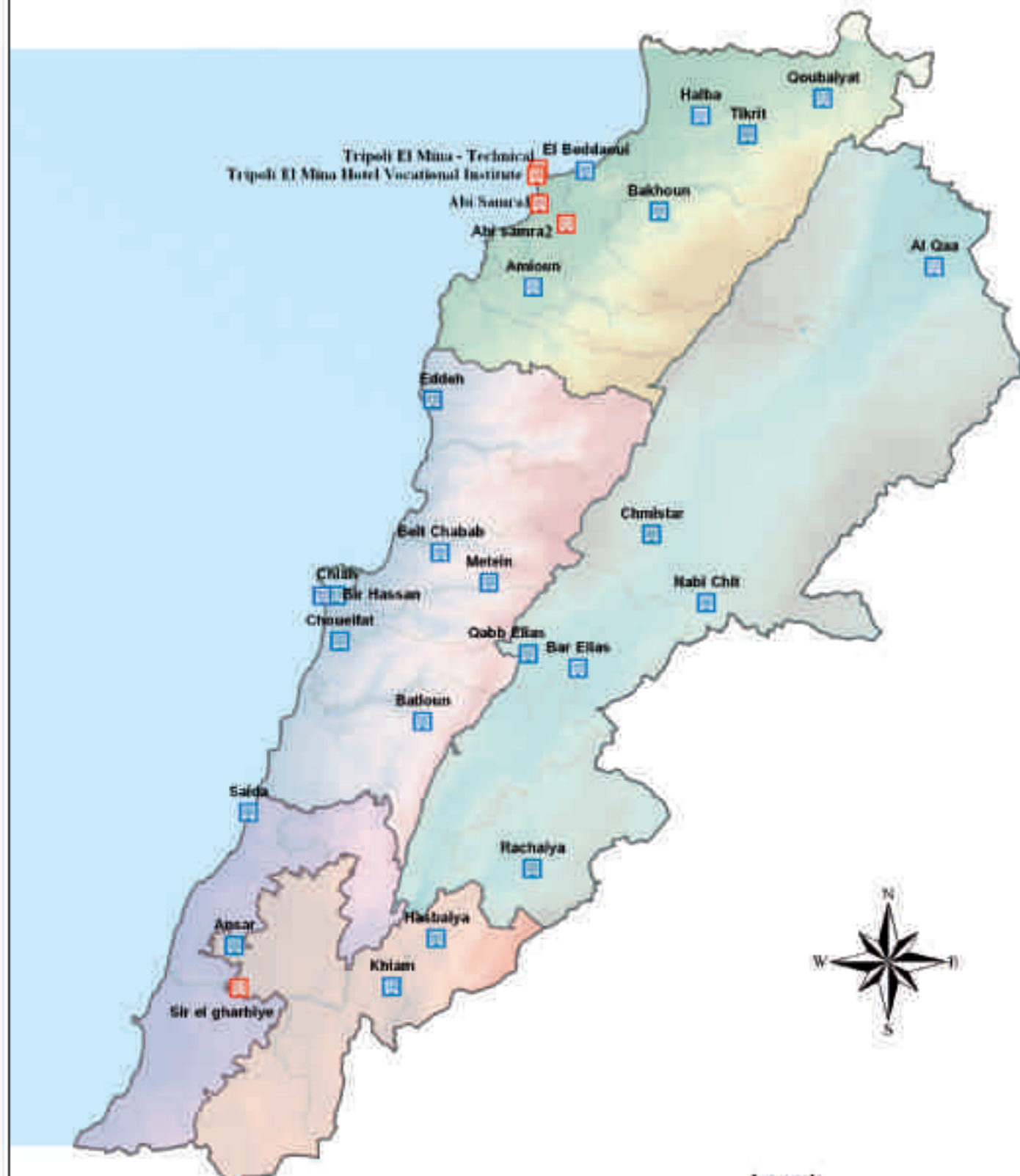
Public Schools Completed & Ongoing Projects



Public Schools Projects Under Preparation



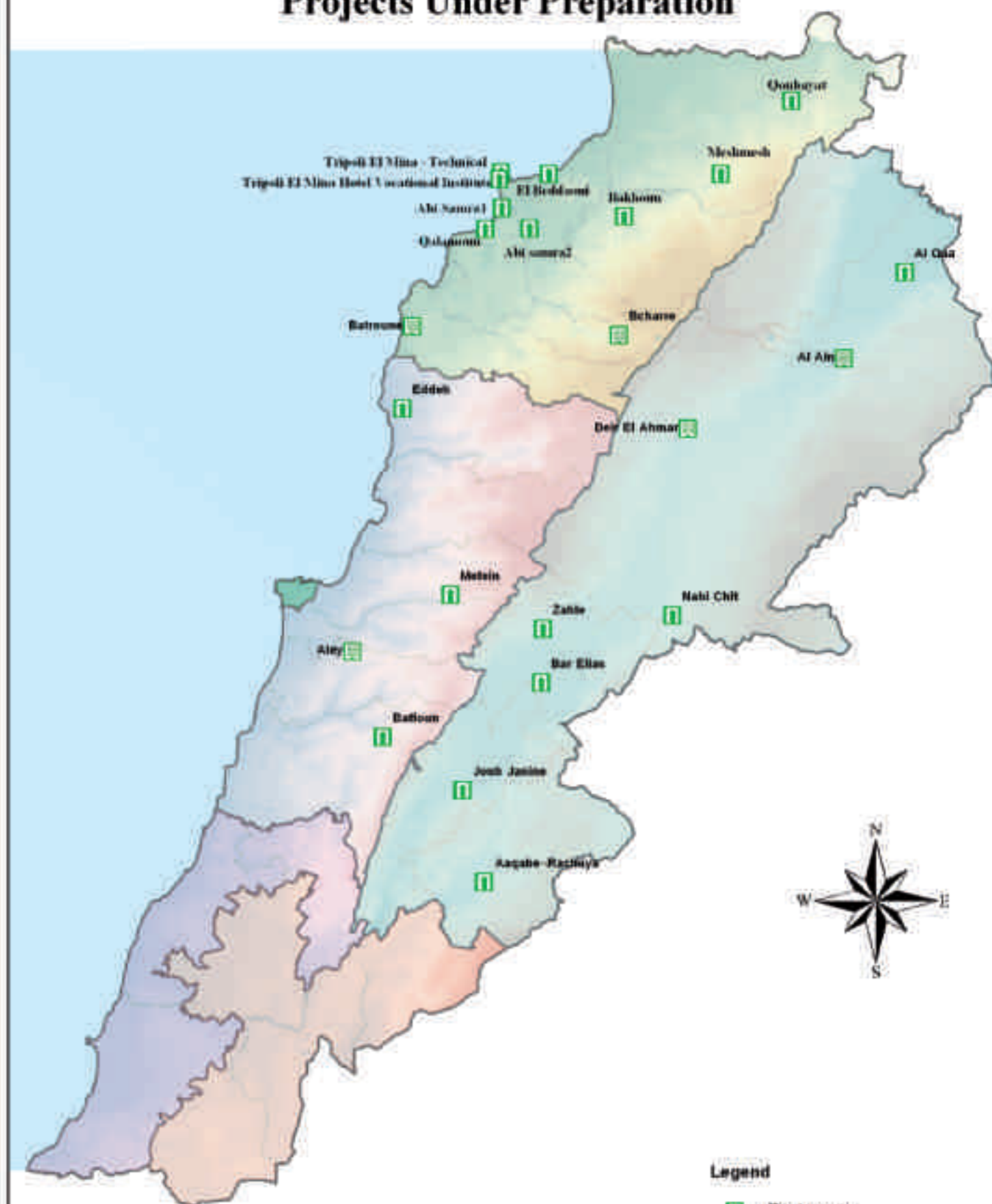
Vocational & Techincal Schools Completed & Ongoing Projects



Legend

- Construction, Completed
- Construction, Ongoing

Vocational & Technical Schools Projects Under Preparation



Legend

- Equipment
- Construction/Equipment

HEALTH

1- Overview of the Health Sector

The Lebanese health system is mainly oriented toward curative care (treatment). It has witnessed a rapid growth in the number of private hospitals and high-tech medical centers.

The Lebanese government has made significant efforts to strengthen the capacities of its institutions and promote the public health sector role in providing health services. However, the private sector still accounts for over 90% of hospital beds and the bulk of healthcare infrastructure with a 17% of hospitalization rate that depends on medical insurance coverage. Also, most emergency services are either provided by the private sector or by private clinics, and most of the primary health care services are provided by health centers run by NGO's. Only 5% of the public health sector expenditures are allocated for primary health care services.

Due to the lucrative nature of health services, the health sector favored the large, high-income cities at the expense of poor communities, where 8% of Lebanese households live below the poverty line, something that led to a disproportionate access to health services and treatments.

However, the Ministry of Public Health (MOPH) -being the last resort for covering the treatment fees of non-insured citizens and supporting the primary health services through a network of primary health centers in collaboration with NGO's - has largely contributed to the improvement of access to treatment by the disadvantaged, which led to an increase in life expectancy to 74 years and a decrease in

infant mortality rate to 5.1 per 1000, despite regional disparities and the uneven provision of health services.

Several initiatives were launched in order to improve the management and quality of health services, in particular the classification of hospitals and the establishment of advanced primary health centers. Initiatives also included the public hospitals autonomy law, the project on Child and Maternal Health in the Akkar region, the establishment of the Control Program for Tuberculosis, the National Program against AIDS, and the National Program for Non-Contagious Diseases etc. Efforts were also made to set up and implement programs about health awareness and medical staff training in the private and the public sectors.

Attempts to improve health information systems were also made, including several national studies (household spending study and health accounts study).

Studies have shown that the overall spending of the Treasury through the Ministry's budget and its share of insurance spending, as well as the budget of other insurance funds, including state employees and military hospitalization, do not exceed 20% of total spending on health. The budget of the MOPH does not exceed 3% of the government's budget.

Six government health funds cover around 38% of the population, while 8% are covered by private insurance companies.

As for the remaining 54% of the population, it is the MOPH that covers their high-cost hospital and pharmaceutical services.

Scattered funding and the lack of control over the private market seriously impede MOPH and public insurance funds from purchasing health services at a good price from the public sec-

tor.

Actually, the use of the primary health care network is shy, and it seems to be motivated by the availability of free medications. This clearly indicates that current expenditure is ineffective, since the majority of health revenues are secured through prevention and primary care rather than through treatment.

However, MOPH planned to introduce performance assessment for primary health care centers. Attempts have been made to implement the mandatory transfer system, from health centers to hospitals.

MOPH spends 68% of its budget on hospitalizations and medications which constitute half of the bill, but the major source of health funding remains family budgets, constituting 44% of overall health spending. This poses a heavy burden on low-income families. Expenditure on health services and goods constitutes an average 14% of family budgets. However, this percentage varies between 20% for the poorest families and 8% for high-income families.

Concerning the health reform, the self-evident question is: will the current health expenditure remain the same?

The major reforms of the health sector carried out by the Ministry of Public Health, in order to control health expenditures, provide efficient and equal health services, reduce the burden on families, control the increase in consumption and reduce medication prices while ensuring quality services and boosting primary health care services at a reasonable, are summarized in the below goals:

- Rationalizing the public expenditures by consolidating the multiple insurance coverage funds.

- Improving the performance of the health system in all regions through a better al-



lotment of the resources of both the public and the private health sectors, in addition to providing sustainable development of the health coverage system

- Increasing the Ministry's capacity to control health services quality and rationalize the Lebanese health sector financing, to cutback the cost of healthcare in proportion to GDP.

- Improving the provision of health services, especially primary health care, which is the cornerstone for improving health levels for citizens, to provide it as an alternative for services provided by the private sector, including checkups, medications, and tests, to be affordable to low-income citizens.

- Audit the quality of pharmaceutical products and decrease the medication bill.

- Promoting and developing a comprehensive strategy for the health sector, with the public sector contributing to health funding.

2- The main achievements of the (1992-2014) period

Health sector policy studies and technical assistance:

Several important studies dealing with health policy have been completed namely the following:

- Study on hospital classification (phases 1 and 2), that resulted in the classification of Lebanese hospitals in line with MOPH's standards.

- Setting out the medical protocol related to the majority of surgical procedures paid by MOPH in public and private hospitals.

- Hospital autonomy study (phase I), pertaining to the formation of autonomous management boards for public hospitals. The Law on Hospital Autonomy law is implemented in all new hospitals with regard to financial and administrative structures of such hospitals.

Within the framework of the reform strategy adopted by MOPH, the following major

achievements were carried out:

- Creating a new management system for MOPH that meets current demands, while awaiting the formulation of a relevant draft law.

- Creating a unified database for beneficiaries of health coverage of all insurance funds, which helped put an end to duplicity in public services.

- Creating a primary healthcare network in cooperation with the civil society which provided comprehensive services to citizens, especially in the neediest areas.

- The MOPH reviewed the medication registration system and added new requirements, such as analysis certificates from internationally recognized laboratories. It also adopted new guidelines in the pricing of medications.

- Conducting workshops and drafting remedial protocols, which improved the level of primary healthcare services.

- Working towards adopting the health card which has become a symbol of the health system efficiency and fairness.

- Enhancing the primary health care through the expansion of the network of primary health care centers: Twenty eight (28) health care centers were constructed and completed in all Lebanese regions. These projects were financed by several donors among which:

- A grant by the Kuwaiti government, to finance the establishment of eight (8) health centers.

- A grant by Prince Al Waleed Bin Talal, to finance the establishment of eight (8) health centers.

- A loan from the World Bank, to finance the renovation and equipping of eight (8) health centers were rehabilitated and equipped.

- The Lebanese government renovated three health centers, which were also supplied with necessary equipment through a financial assistance

from the Italian government.

- Providing hospitalization services to all Lebanese regions.

- Works pertaining to Beirut Governmental University Hospital (BGUH) were completed (540 beds). The construction of four (4) new public hospitals was also completed in the following regions: Nabatieh (75 beds), Tannourine (40 beds), Rachayya (40 beds) and Sir al Diniyeh (40 beds). These hospitals are in full operation now. These four hospital are fully operational.

- The renovation of Tibnine Governmental Hospital (75 beds), Jezzine hospital (40 beds), Hasbaya Hospital (40 beds), and Marjeyoun Governmental Hospital (40 beds) was completed.

- Construction works of three (3) new public hospitals were completed: Halba hospital (75 beds), Sibline Hospital (75 beds) and Hermel hospital (75 beds).

- Expansion and renovation works of four (4) governmental hospitals were completed within the framework of the health sector renovation project. These are: Tripoli, Baalbek, Shahhar el Gharbi and Dahr el Basheq hospitals.

- Zahlé Hospital: (125 beds): works in Zahlé Hospital were completed through a grant provided by the Kingdom of Saudi Arabia and the Islamic Development Bank (IDB).

- Sidon Hospital (125 beds): works in Sidon Hospital was completed through a grant provided by the Kingdom of Saudi Arabia and IDB.

- Keserouan Hospital (75 beds): construction works and major equipment installation, financed by OPEC Development Fund and IDB, were completed. The remaining equipment instal-



lation will be funded by the IDB.

- BintJbeil Governmental Hospital: The State of Qatar committed to implement the BintJbeil Governmental Hospital project. The equipping process started in April 2008 and ended in April 2009.

- A dispensary was established and equipped in Batroun, with a financial assistance from Prime Minister Saad el Hariri.

- Finalization of Phase II of Jezzine Governmental Hospital (40 beds): renovations started in February 2006. Equipment installation started in October 2009 and ended in July 2011. Negotiations are in process to equip the hospital with an intensive care unit.

- Keserouan Governmental Hospital: A contract was awarded to outsource the procurement of (3) lots of medical equipment for Keserouan Government Hospital through a grant by IDB and OPEC. Installation of the first lot of equipment started in January 2008. Installation of all three lots was achieved in July 2010.

- Specialized hospital for the treatment of war and accident casualties in Sidon: A hospital specialized in the treatment of war and accident casualty (US\$ 20 million) was established in Sidon, financed by a grant from the Turkish government. Works started in August 2009 and ended in February 2011. The Turkish government was the implementing partner.

- Becharreh Governmental Hospital: The CDR renovated and equipped the Becharreh Governmental hospital through a grant provided by the Kingdom of Saudi Arabia. Works began in June 2008 and ended in May 2011.

- Renovation and provision of equipment to Tibnine Governmental Hospital (75 beds): renovations works, financed in

the form of a grant provided by the Belgian government, began in February 2009 and ended in June 2011. Procurement and installation of equipment started in April 2009 and ended in June 2011, and were financed by IDB.

- A field hospital of 40 beds was constructed and equipped in Minieh with a grant from the Kuwaiti Red Crescent. Works started in November 2009 and ended in July 2011.

- Renovation range Nassau Governmental hospital, financed by a grant from KSA, started in May 2009 and was completed in April 2012.

- In coordination with MOPH, two feasibility studies were conducted for the construction and equipment of two governmental hospitals, one in Sarafand and one in Sour.

- Feasibility study for the renovation and provision of equipment to the Qarantina Governmental Hospital. The relevant studies started in March 2010 and were completed in mid-2011.

- Laboueh Health Center: the construction of Laboueh Health Center was completed by the end of September 2007. Equipment installation started in December 2010 and ended in April 2011.

- Medical equipment will be supplied to the Laboueh Health Center through a local financial assistance. The equipping process is expected to start in August 2015 and end in 2016.

- Renovation of Kherbet Kanafar Health Center and Sidon Medical Center

- The Sidon Medical Center and part of Kherbet Kanafar Health Center were renovated with a financial assistance from the Government of Lebanon and the government of Belgium. Works started in January 2011 and ended in April 2013. The two centers were fully equipped and works were completed in September 2013.

- Renovation of Baabda Governmental Hospital: The renovation and equipping of Baabda Gov-

ernmental hospital was financed by the IDB. Works started in February 2012 and ended in June 2013

3- Progress, during 2014, in contracts awarded before 2014:

- Construction of a new building for the MOPH:

The construction of new MOPH building has started in collaboration with the MOPH. Phase 1 works started in September 2010 and were completed in September 2011. Phase 2 works began in May 2012 and are scheduled for completion in May 2015. Phase 3 works will kick in April 2015 and scheduled to finish within one year.

- Tibnine Government Hospital Renovations and restorations of Tibnine Government hospital kicked off in January 2009 and were completed in January 2014.

The CDR prepared the tender document to outsource the construction and equipping of Tyre Governmental Hospital. Works kicked off in May 2011 and were completed in August 2014.

The equipping of Rmeich Medical Center is underway with a financial assistance from The Islamic Development Bank (IDB).

The main studies underway are: the national nurses training program which aims to a) develop a study to upgrade the medical institutions activities by training nurses, b) establish a national nursing authority and c) formulate a study on health sector reform to improve the primary health system that will be adopted by the MOPH.

4- Main contracts awarded in 2014:

An Environmental Impact Assessment (EIA) is underway to evaluate the likely environmental impacts of the proposed project related to the construction of Beirut Governmental Hospital – Qarantina. Works kicked off in



June 2014 and were completed in February 2015.

The renovation of the building annexed to Becharre Governmental Hospital is underway. Works started in May 2014 and are scheduled for completion in January 2015.

Construction and equipping of a new hospital in Deir el Qamar

A study was prepared to construct and equip a new hospital in Deir el Qamar. The CDR is currently in the process of releasing tenders to outsource works execution. Works kicked off in June 2014 and are expected to finish within two years. The CDR will continue its efforts to secure the funds necessary for the equipment procurement.

5- Main projects under preparation for the (2014-2016) period

- Renovation and equipment of Baabda Hospital (125 beds): the renovation of the second part of Baabda hospital, financed by an Italian Government grant will kick off soon after the donor has approved the tender document. Works are scheduled for August 2015 and are expected to finish within one year. The medical equipment, procured with funds granted by the AFD and the Lebanese University will be installed as soon as renovation works are finalized.

- Renovation of Qarantina Hospital: a detailed study has been launched to transform the Qarantina Hospital into a public hospital with a specialized Child Care Division, according to a decision taken by MOPH. Works are scheduled for September 2015 and are expected to end in September 2018.

- Maifouq Governmental Hospital – Phase 1: Works for the construction of Maifouq Governmental Hospital – Phase 1 are scheduled for March 2015 and are expected to finish within one year.

Within the framework of improv-

ing the quality of public services in the Lebanese regions hosting Syrian refugees, preparations are underway to develop a project to support emergency rooms in public hospitals, and to renovate and equip health centers across different Lebanese regions, through a financial assistance from the Kuwait Development Fund. Works are scheduled for beginning of 2016 and are expected to finish within one year.

- Tripoli, Tannourine and Syr al Dannieh Hospitals:

The CDR has prepared a study for the additional renovation and equipping of the above-mentioned hospitals, as well as six other governmental hospitals that were constructed by the CDR. Works are expected to start as soon as the necessary funding is secured.

- Sour Governmental Hospital:

The CDR has prepared a study for the construction and equipping of a new Hospital in Sour (75 beds), after a feasibility study for the project was conducted. Works are scheduled for August 2015 and are expected to last three years.

- Sarafand Governmental Hospital:

Following the elaboration of the feasibility study pertaining to the construction and equipping of Sarafand Governmental Hospital, the CDR prepared the construction and equipping study. Works are scheduled for August 2015 and are expected to last 3 years.

- The radiology and lab divisions in Orange Nassau Hospital were equipped through a grant offered by the Kuwaiti Development Fund.

- Construction, renovation and equipment of Health Centers in Saksakieh, Khalwat, Jbaa, Boudai, Terbol, Damour, Ghobeiri, Qana, Ghazeer and Aamchit, funded by IDB.

- Preparations are underway to establish a blood bank in the Rafik Hariri Governmental Hospital and will potentially be financed by IDB.

- Fundraising is underway to secure the necessary funds for the construction of two governmental hospitals, in the city of Aley and in Berti town.



Karantina Public Hospital



Karantina Public Hospital



Sarafand Public Hospital



Tyre Public Hospital



Main contracts awarded in 2014

Project	Value (US\$)	Source of Funding	Start Date	Scheduled Completion
Environmental Impact Assessment (EIA) to evaluate the likely environmental impacts of Beirut Governmental Hospital - Qarantina	22,000	IDB	Jun-14	Feb-15
Supervision of execution of the project related to Sour Governmental Hospital	435,600	Lebanese Government	Aug-14	Aug-17
Construction of Deir el Qamar Governmental Hospital – Phase 1		Lebanese Government	Jun-14	Jul-16
Renovation of building annexed to Becharre Governmental Hospital	1,112,552	Lebanese Government	May-14	Jan-15

Main projects under preparation for the (2014-2016) period

Project	Value (\$US)	Source of Funding	Start Date	Scheduled Completion
Renovation of Baabda Governmental Hospital – Phase 2	4,000,000	(Italy (grant	Jun-15	Dec-16
Construction and equipping of Sarafand Governmental Hospital	9,000,000	IDB	Sep-15	Sep-18
Construction and equipment of Sour Governmental Hospital	10,500,000	IDB	Aug-15	Aug-18
Construction and equipping of a hospital in Maifouq – Phase 2	5,352,000	Saudi Development Fund	May-16	May-19
Construction and equipping of a governmental hospital in Deir El-Qamar	6,000,000	Lebanese Government	Jul-16	Jul-18
Construction and equipping of a hospital Maifouq – Phase 1	2,803,705	Lebanese Government	Mar-15	Mar-16
Renovation of Qarantina Hospital	7,000,000	IDB	Oct-15	Oct-18

Public Health Completed, Ongoing & Under Preparation Projects



SOCIAL AND ECONOMIC DEVELOPMENT

Integrated Regional Development Projects

Economic and Social Fund for Development (ESFD)

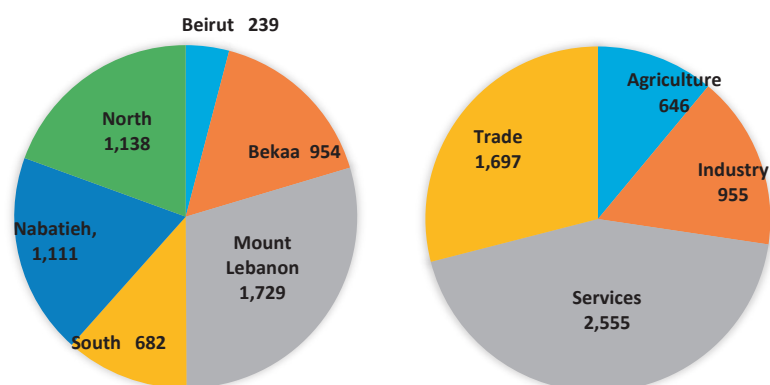
The Economic and Social Fund for Development (ESFD) contributes to social development in Lebanon and acts as a permanent poverty alleviation entity. The purpose of ESFD is to reach out to the under-served communities to improve their living conditions and create job opportunities for Small and Medium Enterprises, and to limit unemployment and call upon a balanced economic growth.

First: Job creation and income generation Component

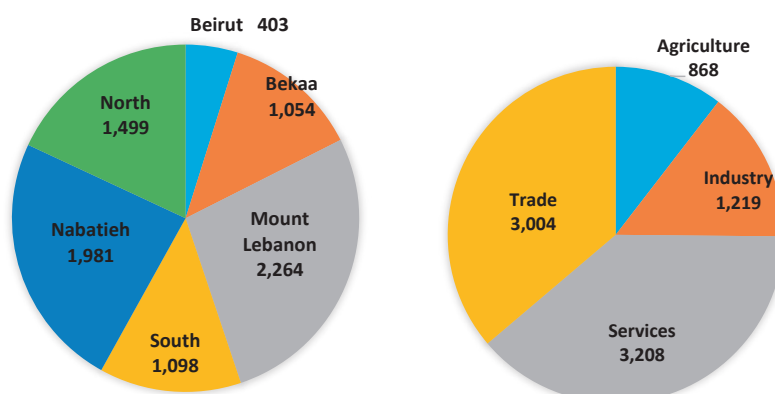
The job creation component provides financial assistance to private projects of SMEs in multiple sectors in order to increase employment opportunities across all Lebanese regions through the provision of productive loans and incentives in partnership with five commercial banks having branches across the Lebanese territory, and facilitate access to credits for financially excluded people.

In 2014, the ESFD offered financial support to a number of Small and Medium Enterprises (SMEs) to execute 611 projects, which led to the creation of 564 new jobs.

From 2004 until the end of 2014, the ESFD financed 8,299 projects and created 5,853 jobs.



Distribution of loans by sector and governorate until 2014



Business Consulting Services

To provide individuals and SMEs with credit facilities to invest in new or existing economic activities, the ESFD seeks the help of mentoring experts. These mentors provide advice and guidance on how to create a business plan, prepare a cash flow forecast and fill applications to ensure that applicants are in the best possible position to receive funding from a bank collaborating with the Fund. These business consultation experts also follow up on the implementation of these business projects.

In 2014, the ESFD relied on a team of 14 Freelance Business Advisors to offer Business Consulting Services, which contributed to the funding of 268 projects and the creation of 286 new jobs.

Second: Local Development and livelihood Improvement Component

The EFSD helps 147 villages in the most deprived regions by mobilizing the efforts of partners in local communities, their elected representatives and other local stakeholders to implement development activities. Since the commencement of this Component up until the end of 2014, working groups and local committees received support to implement 96 local development projects, valued at around EUR 31,086,139 million. The EFSD follows a participatory approach in the local development process with emphasis on women needs and priorities and environment protection.



Project title	No. Of beneficiaries	Total value in EUR
Hrar (Akkar)		
1. Rehabilitation of irrigation canals in the villages of Qabiit, Houaich, Khreibet el Jerd and Habchit	22,284	290,300,00
2. Establishment of an educational support center in Hrar Publu School		
3. Renovation of the municipal hall		47,700,000
		14,000,000
Total		352,000,00
Danniyeh (Danniyeh District)		
1. Supply of drinking water in the villages of Debeel, Korhaya and Asyamout	15,300	194,683,33
2. Organization of training workshops for local associations		9,750,00
3. Provision of equipment to a primary health care centre in Kfarbanin		55,328,33
4. Rehabilitation of a playing field in Qmamin public school		40,238,34
Total		300,000,00
Wadi Khaled (Akkar)		
1. Provision of equipment to the health centres belonging to the network of the MoPH and MoSA in Hisheh and Amayer		274,025,00
2. Conducting expedited vocational training and school support	39,638	
		135,205,00
Total		409,230,00
General Total		1,906,230,00

Projects that are still active:

Fneideq (Akkar)		
1. Construction of solid waste treatment plant for	24,000	394,000,00
Mashta Hassan (Akkar)	22,400	
1. Provision of equipment to a primary care center		250,000,00
Dora (Akka)	4,100	
1. Construction of sewage network and wastewater treatment plant		440,012,00
General Total		
		1,084,012,00

B- Support to Municipal Finance in Lebanon-MUFIN:

In September 2013, the ESDF launched a new project funded by the EU and entitled “Support to Municipal Finance in Lebanon – MUFIN”, to reduce the burdens of Syrian refugee influx on local host communities. The EUR 16 million project targets the municipalities of the local communities hosting the highest percentage of Syrian refugees in the North and the Bekaa. The project aims at improving the level and quantity of basic services rendered by these municipalities, through the implementation of infrastructure projects aimed at improving the supply of drinking water, and managing waste water and solid waste.

List of MUFIN projects in the Bekaa:

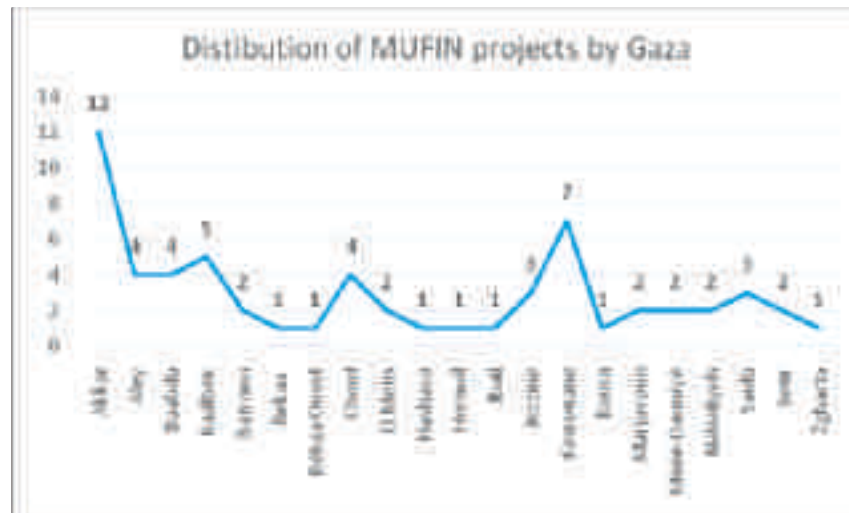
Local Community	Project	Number of Beneficiaries	Estimated Value (in Euro)
Kaa	Provision of trash collection vehicles to the Municipality	17,700	137,110
Gaza	Expansion of wastewater network and connecting it to the wastewater treatment plant in Jib Janin	26,500	241,109
Souairi	Construction of drinking water reservoir and connecting it with the general network	12,500	211,000
Dalhamieh	Procurement of solid waste collection trucks	8,700	64,505
Hermel	Installation of sewage network and waste water treatment plant	36,500	3,000,000
Bar Elias	Construction of solid waste treatment plant	166,500	4,000,000
El Marj			
Kab Elias			
Saadnayel	Rehabilitation of water distribution network	34,000	7,000,000

List of MUFIN projects in the North of Lebanon

Local Community	Project	Number of Beneficiaries	Estimated value (in Euro)
Tripoli/Qobeh	Digging and installation of artesian well in Qobbeh and connecting it with the general network	185,394	194,467,60
Menieh	Providing the municipality with trash collection vehicles	100,000	198,220
Baddaoui	Providing the municipality with trash collection vehicles	44,000	67,706
Kfartoun -Akroum	Digging and installation of an artesian well	7,500	196,992,80
Qonnieh	Renovation of existing artesian well and construction of propelling line	2,350	135,083
Mouhamara	Digging and installation of an artesian well and expansion of the drinking water distribution network. Construction of a new underground reservoir and a water cistern	41,500	400,000
Sahle	Renovation of existing artesian well and underground reservoir and construction of propelling line to the reservoir. Construction of water network in the new area of the village	2,020	191,166
Wadi Khaled villages cluster	Rehabilitation Nabaa el Safa station and transmission of water from this station to villages and towns of Wadi Khaled	51,291	2,000,000



In addition to the active projects that the Fund will continue to implement through its two main components: Creation of jobs and local development, the Fund will continue, through the MUFIN project signed with the EU, to support the least underprivileged small municipalities across all districts, with an allocation of EUR 1,5 million:



Below are summarized the small projects that will be implemented by the Fund in the field of drinking water, wastewater and solid waste:

	District	Village	Project Title
1	Batroun	Kfarhi	Procurement of pick-up truck
2	Batroun	Edeh	Procurement of pick-up truck
3	West Bekaa	Zlaya	Procurement of pick-up truck
4	West Bekaa	Tak-Zanoub	Continuation of waste-water network
5	Chouf	Deir Kousha	Renovation of water sources and construction of necessary installations
6	Chouf	Alkanisa	Renovation of the historical water source of the village
7	Chouf	Haret Jandal	Installation of drinking water line from the village spring to the water reservoir
8	Chouf	Mazraet Al-Dhaheer	Installation of artesian well
9	Koura	Bandael	Construction of water reservoir
10	North Metn	Kfaraab	Procurement of Skid Road Loader
11	Mennieh-Dannieh	Kfarshlan	Procurement of solid waste containers
12	Mennieh-Dannieh	Bhwita Afka Bshnata	Renovation of drinking water network
13	Nabatiyeh	Gazeh	Renovation of the existing well that alimnts the village's reservoir
14	Hermel	Mazraet Soujod	Procurement of Skid Road Loader
15	Baabda	Khrtada	Procurement of pick-up truck
16	Baabda	Jouret Arssoun	Construction of drinking water treatment plant
17	Baabda	Alkhraibeh	Procurement of Pick-up truck
18	Baabda	Deir El-Harf	Procurement of Skid Road Loader
19	Baalback	Khilila Alhafoush	Procurement of Skid Road Loader
20	Baalback	Mazraat al-Souedan	Construction of water reservoir
21	Baalback	Khrha	Procurement and installation of power generator to aliment the well of the village
22	Baalback Hermel	Alkhraibeh	Construction of water reservoir
23	Bint Jbeil	Faroun	Procurement of solid waster containers
24	Jbeil	Edeh	Procurement of Pick-up truck

25	Jezzine	Khtein Hdaieb	Procurement of Pick-up truck
26	Jezzine	Sabah	Rehabilitation of the Village water fountain
27	Jezzine	Rimat Shkadif	Procurement of Pick-up truck
28	Hasbaya	Koukaba	Continuation of wastewater network
29	Zgharta	Bnacheh	Procurement and installation of power generator to aliment the well of the village
30	Sour	Alhaninah	Procurement of Pick-up truck
31	Sour	Alnafakhiya	Procurement of Pick-up truck
32	Sidon	Abra	Procurement and installation of power generator to aliment the well of the village
33	Sidon	Kfarbeit	Procurement of Pick-up truck
34	Sidon	Tanbourit	Procurement of Road Sweeper
35	Aley	Ain Alsaideh	Continuation of wastewater network
36	Aley	Bouzraidah	Renovation of irrigation water dam and installation of canals
37	Aley	Alrjmah	Procurement of Pick-up truck
38	Aley	Sarhamoul	Procurement of Skid Road Loader
39	Akkar	Aoun Algouzlan	Procurement of Pick-up truck
40	Akkar	Alfardh	Procurement of Pick-up truck
41	Akkar	BaniSkhr	Provision and installation of power generator to aliment the well of the village - في
42	Akkar	Beit El-Haj	Renovation of water sources and construction of necessary installations
43	Akkar	Kroum Arab	Procurement of Pick-up truck
44	Akkar	Mounjez	Renovation of drinking water network
45	Akkar	Alnahrieh Boustan alhoursh	Installation of water transmission line from the artesian well to the village's reservoir
46	Akkar	Safinat Aldreib	Procurement of Pick-up truck
47	Akkar	Alkoueikhat	Road Sweeper)Procurement of)
48	Akkar	Dher Alkhnbarr	Procurement of Pick-up truck
49	Akkar	Algzaillieh	Procurement of Pick-up truck
50	Akkar	Arka	Procurement of Pick-up truck
51	Kesserouan	Daraia	Renovation of irrigation canals
52	Kesserouan	Alhoussein	Renovation of water network
53	Kesserouan	Ghdrasa	Procurement of Pick-up truck
54	Kesserouan	Hayata	Installation of artesian well
55	Kesserouan	Alaazra Alouzzr	Procurement of Skid Road Loader
56	Kesserouan	Batha	Procurement of Skid Road Loader
57	Kesserouan	Zeitoun	Procurement of Skid Road Loader
58	Marjeyoun	Eble Elssakhy	Renovation of village water spring and irrigation canals
59	Marjeyoun	Alkoulaiiaa	Procurement of Pick-up truck



Main orientations of the Fund during 2015:

The Fund aims also at contributing to the stimulation of the local economy in the villages hosting Syrian refugees through the implementation of the Recovery of Local Economies In Lebanon (RELOC), a EUR 7 million project signed with the EU, to implement productive agricultural projects in order to support productive activities and create jobs in the North, the Bekaa and the South.

Project for Innovative Partnership to Promote Interregional Communication through Local Development (ART GOLD Lebanon)

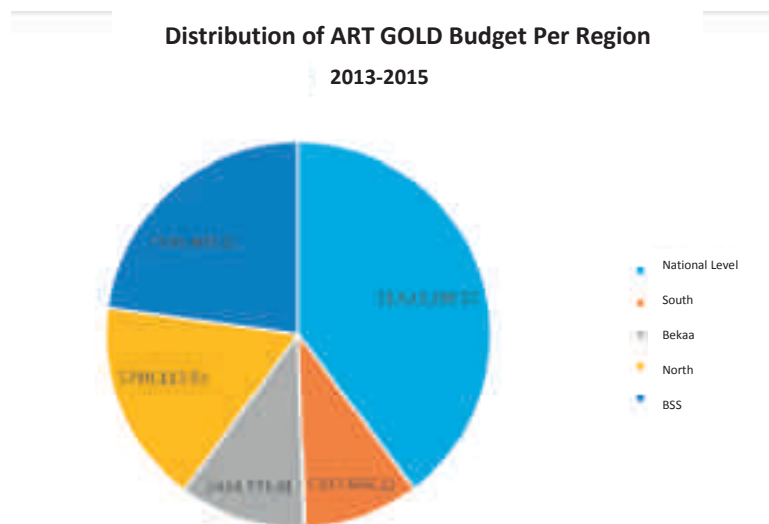
Since the launching of the ART GOLD (AGL) Programme in September, 22 2006, as part of the ART Global Initiative, UNDP continues, in partnership with the CDR, to implement this Programme in order to achieve balanced and sustainable development in four regions characterized by high poverty rates and raging socio-economic problems. These regions are:

1. North Lebanon (Three districts): Akkar, Minnieh-Danniyeh and Tripoli.
2. South Lebanon (Five districts): Marjeyoun, Bint Jbeil, Nabatieh, Sour and Hasbaya.
3. Bekaa (Five Districts): Rashaya, West Bekaa, Baalback, Hermel and Zahle.
4. Beirut Southern Suburbs (Baabda District): Municipalities of Chiyah, Borj El Brajne, Furn El Chebak, Ghobeiry, Haret Hreik and El Mreyjeh.

In the beginning of 2013, the AGL phase II was launched by the UNDP and the CDR, for an implementation period of 36 months (2013 to 2015). New financial contributions were secured from the EU, the Italian

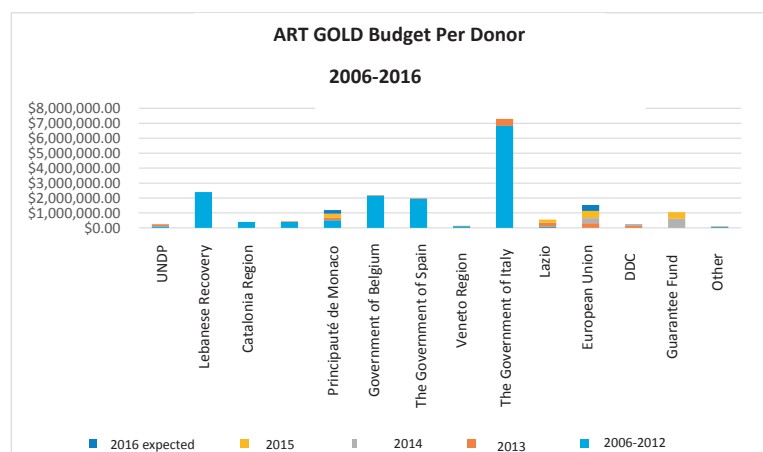
government and the Principality of Monaco in addition to contributions from NGO's and European decentralized cooperation institutions. The AGL three-year total budget (2013-2015) amounts to US\$ 4,086 million distributed by regions as follows:

Distribution of ART GOLD project budget by regions (2013-2015)



The total budget of ART GOLD since it has been launched in 2006 up until the end of 2014, amounted to around US\$ 17,6 million distributed as follows:

Distribution of ART GOLD project budget by donors (2006-2016)



Major achievements of ART GOLD Lebanon in 2014:

In 2014, the ART GOLD Programme has made significant accomplishments across various sectors, in partnership with local agencies and authorities in the targeted regions.

First: Main achievements across different sectors:

A. Local Economic Development Sector (including agriculture):

A.1 Local Economic Development Agencies (LEDAs):

In 2014, ART GOLD continued to offer support to Local Economic Development Agencies in the four targeted areas of the Programme to



help them in achieving self-sustainability and adopting a partial top-down support approach. Below are mapped out the main activities achieved in this context:

- Signature of a Memorandum of Understanding between “Art Gold” and the “Local Economic Development Agency in the South of Lebanon” South LEDA, to cover the operational costs of the Agency for a period of nine months, provided that the Agency becomes financially auto-sufficient to cover the remaining operational costs as of April 2014.
- Inauguration of a packaging center in Sour in October 2014, under the sponsorship of the Ministry of Agriculture. The center was renovated and equipped during 2013 to support farmers and farmers’ cooperatives in Tyr and the neighboring villages. This initiative is implemented by the South LEDA and the relevant cooperatives in coordination with the Ministry of Agriculture.
- Opening of the first ambulant market within the vicinity of Chiyeh Municipality, in Beirut Southern Suburbs, benefiting 100 business ventures including a number of cooperatives, SMEs and individuals.

A.2 “Enhancing Economic and Social Development in North Lebanon” Project, funded by the Government of Italy: the purpose of the project is to improve the economic and social conditions of farmers who have been under a lot of strain due to the exacerbation of the Syrian crisis and the closure of the northern borders. The project also aims at improving the level of primary health care services in Wadi Khaled-Akkar, including public schools within a period one year. In 2014, the project team implemented a number of activities within the framework of the two main components as follows:

1- Economic Development component: the project targeted 942 cows breeders in Wadi

Khaled, through the signature of an agreement with the Local Economic Development Agency which resulted in the following achievements:

- Conducting a survey about the cow breeders situation covering facts about economic and social statuses of cow breeders, number of cows, quantity of milk produced, milk selling mechanisms, processing intended for sale and domestic consumption, milking methods adopted, health and hygiene and veterinary services.
- Organization of a health and nutrition training workshop for breeders. 615 out of 942 breeders participated to the workshop.
- Distribution of hygiene and milk testing instruments to 890 breeders.
- Distribution of hygiene and nutrition posters to 890 breeders.
- Conducting field visits to cowsheds by specialist to give guidance to breeders.
- Formation of a working group of active breeders to establish a milk production cooperative in Wadi Khaled.

2 - Integrated social services component:

The programme launched a communication and dialogue mechanism that brought together municipalities, primary health care centers, development services centers and public schools in order to activate the health services system in Wadi Khaled. Below are summarized the main activities carried out under this component:

- Conducting meetings with the heads of municipalities to raise their awareness and increase their motivation regarding the importance of health services and the role of municipalities in providing health services.
- Conducting meetings with primary health care centers and development services centers to identify their services and the problems and challenges that they face.

- organization of a workshop for

municipalities, representatives of primary health care centers, social development centers, school principals, representatives of the Ministries of Education and Health and the UNDP, with the participation of experts from Tuscany region in Italy.

The purpose of this workshop was to conceptualize the improvement of primary health care system in Wadi Khaled and identify priority needs.

- Provision of equipment to the primary health care center in Wadi Khaled affiliated with Al Makassed Islamic charitable association which belongs to the network of primary health care centers adopted by the Ministry of Agriculture. The center was equipped with a multi-purpose ultra sound device and a microbus to provide transportation services from and to the center.

- Creation and equipping of dispensaries in 11 public schools in Wadi Khaled to conduct school health examinations for students and linking the dispensaries with the primary health care centers operating within the geographical area of these schools.

B - Tourism Sector:

In 2013, the Municipality of Marseille in partnership with ART GOLD offered financial and technical support to the Al Fayhaa Union of Municipalities, to encourage historical and archaeological tourism. A GIS Application was created to enable visitors and tourists using smart phones to look into the history of historical sites on the distribution map in the three Al Fayhaa cities (Tripoli, El Mina and Bad-doui). 25 archeological buildings and sites were selected to be included in the GIS Application that offers main information in Arabic, English and French when scanning the code affixed



on the entrance of the site. The project duration is 2 years (2013 – 2014).

In 2014, the number of heritage buildings which received coded signs reached 53 buildings. A specialized heritage buildings expert was contracted to formulate the historical descriptive texts of such buildings. The team works in collaboration with the Ministry of Tourism and the Ministry of Culture to complete the necessary procedures and wrap up the project during 2015.

C- Health Sector:

Strengthening primary health care in Ghobeiry/Beirut Southern Suburbs (BSS) Municipality: In the context of the activities of the new primary health care center established by the municipality of Ghobeiry in 2013, the medical staff of the center performed medical examinations to 1800 students in elementary public schools. A number of students were referred to the primary health care center for treatment and follow up.

D- Governance Sector:

- Social survey of family livelihood conditions in Furn El Chebak/Southern Suburbs of Beirut: The purpose of the survey is to collect and analyze data on family livelihood conditions in the region of Furn El Chebak and Beirut Southern Suburbs, in order to formulate a strategy for the municipality to implement projects that respond to local community needs.

In 2014, the draft final report of the social survey was elaborated covering 8723 residents and economic units (shops, clinics...).

E- Education Sector:

Study on school dropout rate in El Mreyjeh/Beirut Southern Suburbs: Within the framework of the initiative designed to reduce

the drop out of children aged 8-14 years old – the ART GOLD Programme trained the staff of the social municipal office of the Municipality of El Mreyjeh on collecting data, in collaboration with stakeholders in all five targeted public schools (Tahwitat El Ghadir Public School, Laylake Public School, El Ghadir Public School, Borj El Brajne Public school). In 2014, the survey participants issued the final report in light of the data collected in 2013.

Second: ART GOLD succeeded in securing additional funding to implement the following projects:

1- Projects funded by the European Union - ENPI Projects:

- “Live Your Tour” project for the development of sustainable tourism: “Live your Tour” (2013-2015) is implemented in the Bekaa by the Union of Baalbeck and Deir El Ahmar Municipalities, the Union of Chouf El Souayjani Municipalities and the American University of Culture and Education (AUCE). The project is designed to promote Chouf and Baalbeck/Deir El Ahmar as attractive tourist areas. Besides Lebanon, “Live your Tour” involves three Mediterranean countries, Italy, Spain and Tunis.

In this context “Live your tour” carried out the following activities in the Bekaa, in 2014:

- A contract was awarded to an expert in tourism planning to formulate a plan to organize and revive the tourism sector in Baalback and Deir el Ahmar, in order to promote the regions landmarks within an institutional framework that ensures sustainability and efficient management of the sector.

- Creation of a GIS system for each of the participating unions to facilitate data collection and mapping of tourist landmarks, historical sites and tourist services centers. The geographical

database will be developed in 2015 in order to be made available on the internet to the largest number of interested persons locally and internationally.

- In 2015, a contract was awarded to a tourism consultant to map out important historical and tourist landmarks, in order to a) promote such landmarks and put in place a comprehensive plan for their development to enable them to receive more visitors and b) place these landmarks on a tourist route, in collaboration with national and international tourism companies and c) issue brochures containing major information related to these landmarks.

a. Local Agenda 21 in Territorial Planning in Energy and Waste Management: The project is implemented in the South of Lebanon from 2013 to 2015 in partnership with the Union of Municipalities of Jabal Amel. Below are outlined the major accomplishments of Local Agenda 21:

- Attendance by the project's team of the second steering committee meeting in Jordan.

- Elaboration of the regional plan on energy resources and waste management that includes 16 villages from the Union of Municipalities of Jabal Amel, by the consultant contracted for this purpose.

- Implementation of environmental activities by environmental volunteers recruited by the Union of Municipalities of Jabal Amel.

- Inclusive Governance of Sustainable Coastal Metropolis (MEDSEATIES): The project's aim is to empower targeted local authorities in the multi-level decision-making processes related to environmental, economic and urban management of coast cities. The project is implemented in six metropolitan areas from 5 Mediterranean countries: Aqaba/Jordan, Tripoli/Lebanon, Thessaloniki/Greece, Genoa/



Italy, Marseilles and Toulon/ France. The Project duration is one year (2014-2015).

In 2014, the Lebanon team achieved the following:

- Establishment of the Lebanon project committee headed by the Union of Al Fayhaa Municipalities and composed by representatives from Al Manar University, LEDA North and the UNDP.

- Assessment of existing initiatives and procedures pertaining to the management of coastlines in Lebanon in accordance with the indicators and criteria adopted in the management of coastlines.

- Identification of potential partners involved in coastlines management and of the legislations adopted in coastlines management.

In addition to these tasks, the UNDP, being the implementing partner of the Governance component of this project, collaborated with MEDSEATIES partners in other countries to develop a report encompassing the achievements of all partners.

b. Territorial networking for capacity building and local development: a cross border experience linking Lebanon, Jordan, France, Italy. The project is implemented in Beirut Southern Suburbs from 2012 until April 2015 in partnership with the Federation of Municipalities of Zgharta, Tyr, and Jezzine, Greater Madaba Municipality, the regions of Tuscany and PACA in Italy, OXFAM/Italy and ARCI. The project aims at promoting networking between partners to achieve economic development. The project launched its activities by conducting a study on the leather-manufacturing sector in Beirut Southern Suburbs to identify the needs and problems faced by this sector in collaboration with the Beirut Southern Suburb LEDA.

c. Supporting Dry Land Development: a project funded by the UN Dry Land Development

Center, whose purpose is a) to support women cooperatives involved in agro-food processing in the South of Lebanon and the Bekaa in order to improve their economic situation and b) to focus on renewable energy. The project implementation period will be wrapped up by the end of 2015.

During 2014, the United Nations Development Programme started the implementation of a project aimed at installing a system that works on solar energy (PV Solar System) to pump irrigation water to a wooded area within the municipality of Hermel in the Bekaa stretched over more than 20,000 square meters. This project will help the Municipality of Hermel to preserve the green forest areas, which are few in the region, through the supply of irrigation water using renewable energy and reducing the electricity bill which constitutes a burden on the municipality.

The UNDP has continued, in cooperation with the Chamber of Commerce of the Bekaa, to implement the plan aimed at supporting the women cooperatives specialized in the food industry in the Bekaa by providing some equipment and materials, organizing training courses and helping to market their products in the local and global markets.

Third: Main orientations of the Programme in 2015:

- Pursuing the projects that were launched in 2014, while continuing to support the Lebanese host communities affected by the Syrian crisis and alleviating the repercussions of the crisis on the poorest communities.
- Promoting the Decentralized Cooperation Partnerships to learn from international best practices and experiences related to local development across all sectors.

- Continuing to support the Local Economic Develop-

ment Agencies (LEDAs) in the four regions to strengthen their participation in boosting the economy of the areas where each LEDA operates and to ensure the sustainability of their interventions.

- Regional Development Program in Akkar – Phase II

In 2014, the CDR and the UNDP continued the implementation of activities agreed under the Regional Development Program in Akkar – Phase II, while continue their collaboration efforts to support the development process in the Akkar district, in particular in Wadi Khaled.

Consultative meetings were intensified between both parties to develop this partnership and modify the orientations of the regional development program in Akkar in order to launch the third phase of this program by focusing on the development of value chains in agricultural productive sectors that will have a positive impact in advancing economic development in Akkar, one of the poorest areas in Lebanon.

This new approach is expected to help reduce the repercussions of the Syrian crisis and the huge influx of Syrian refugees to Akkar that place a huge strain on the economic and social conditions.

Joint Projects with UN Organizations working in Lebanon:

First: Support to the Implementation of the Millennium Development Goals-MDGs

The CDR and UNDP signed the “Support to The Implementation of The Millennium Development Goals” project on 24/07/2008. The project aims at helping the Lebanese government implement policies and activities that contribute to the attainment of



MDGs by 2015, as agreed by Lebanon and the countries of the world. These activities were completed by the end of April 2014.

Main achievements in 2014

- Staff training on management and statistical skills and the provision of office furniture and computers to the National Employment Institution within the scope of the initiative aimed at creating the "Employment Fund in Lebanon".

- The launch of the “Lebanon Millennium Development Goals Report for the year 2013-2014” under the auspices of the Prime Minister and with the participation of representatives from public administrations and institutions, including the Council for Development and Reconstruction, and the civil society. This ceremony took place during the visit of Ms. Helen Clark, Administrator of the United Nations Development Programme to Lebanon in September 2014.

Second: Enhancing Capacity for Social Development

The “Enhancing Capacity for Social Development” project is jointly implemented by the United Nations Development Program (UNDP) and the Ministry of Social Affairs (MoSA). The purpose of the project is to offer the necessary support to MoSA to shift from a Ministry of social affairs to a Ministry of social development and promote its leading role in the improvement of the quality of life of local communities and groups from disadvantaged backgrounds.

Lebanon is witnessing a sharp rising influx of refugees representing a burden weighing heavily on the Lebanese host communities and competing for

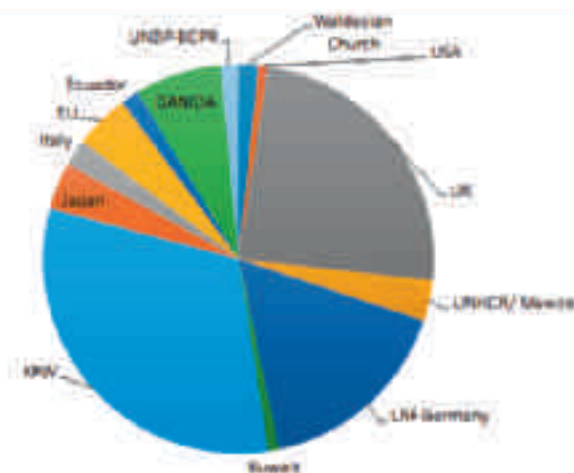
already limited social services, employment and other economic opportunities. To tackle this issue, the Lebanese Host Communities Support Project (LHSP) was created as part of the Enhancing Capacity for Development Project. The LHSP aims at increasing and sustaining stability in the areas affected by the Syrian crisis through improving livelihoods and providing basic social services. The project will also contribute to strengthening the capacities of the MoSA's and local civil society actors in order to set priorities, mitigate conflicts, settle disputes, provide services and create jobs in the most affected areas. A steering committee was formed to provide strategic direction for the LHSP and ensure that adequate mechanisms are in place to select and implement projects.

This committee is formed by representatives of the following entities:

- The Presidency of the Council of Ministers
- The Ministry of Social Affairs
- The Ministry of Education and Higher Education
- The Ministry of Interior and Municipalities
- The Council for Development and Reconstruction
- The World Bank
- The European Union
- UNHCR
- UNDP

Main achievements in 2014

With the financial support of UNHCR, Denmark, Ecuador, Italy, Japan, Monaco, United States, UK Development Fund, European Union, Germany, Lebanese Development Fund and Waldesian Church, the LHSP implemented projects in different sectors as follows:



Health Sector: Projects aimed at supporting primary health care centers and hospitals by equipping them with necessary laboratory and x-ray equipment and supplies. By supporting health centers, health services become available to both Lebanese and Syrians at reduced costs.

Education Sector:

- a) Projects aimed at providing public schools with the necessary laboratory and IT equipment
- b) Projects aimed at renovating a number of schools to increase school enrolment capacity

Water management:

People living in isolated remote areas are faced with water scarcity; they do not obtain water in sufficient quantities to cater for their daily



needs. To tackle this problem, the LHSP installed water pipes and provided vehicles equipped with water reservoirs to transport water.

Waste management:

Due to the increasing number of Syrian refugees and the incapacity of municipalities to handle huge quantities of accumulated trash, the LHSP provided municipalities with waste bins and trash collection and transfer vehicles and installed or renovation of sewer networks.

Income generating projects:

a) Provision of new equipment and materials to women food associations to increase their productivity and improve the quality of their products.

Social projects:

The purpose of these projects is to encourage social activities that gather people from different social backgrounds and to ensure entertainment opportunities for the youth.

Social cohesion projects:

The aim of these projects is to promote interaction and communication between Syrian refugees and Lebanese host communities.

Infrastructure Projects:

a) Renovations and repairs of internal roads to facilitate students' access to schools and employees' access to the workplace.

b) Cleaning and renovation of sewer networks.

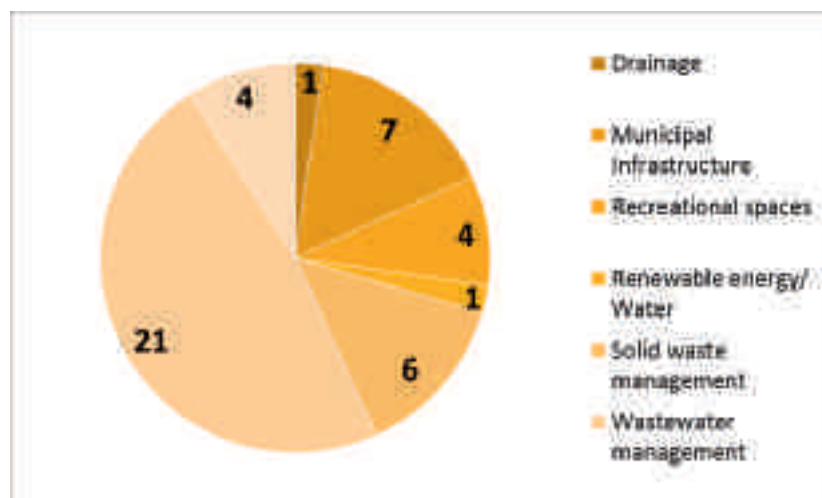
Another initiative was also implemented in partnership with the UNDP, the Ministry of Education and Higher Education, the Ministry of Health, the Ministry of Interior and Municipalities and the Ministry of Social Affairs. A memorandum of understanding was signed for that purpose to promote cooperation among the partners in order to 1) strengthen local governance to achieve local development on the regional level and b) improve social and economic conditions of local communities.

Projects Implemented to support Municipal Services (a total of 44 projects):

Distribution by geographical area and category

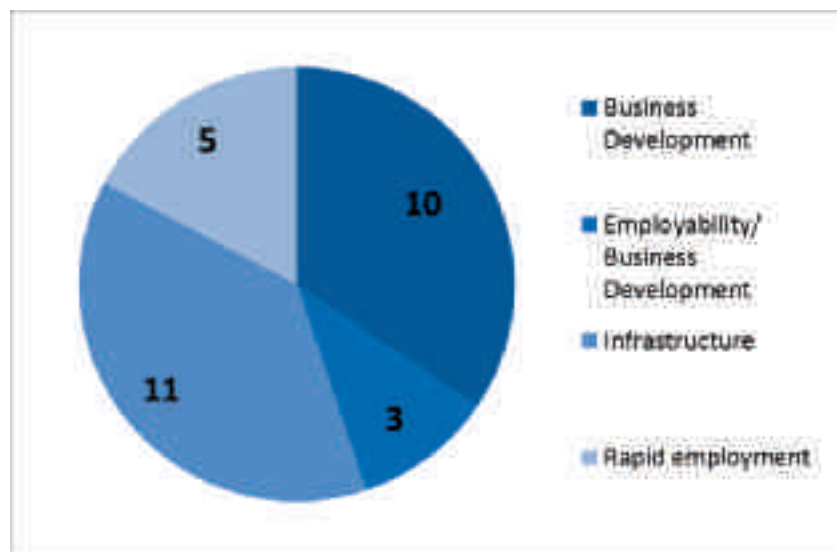
Total Lebanese Beneficiaries: 396,000

Total Syrian Beneficiaries: 137,000

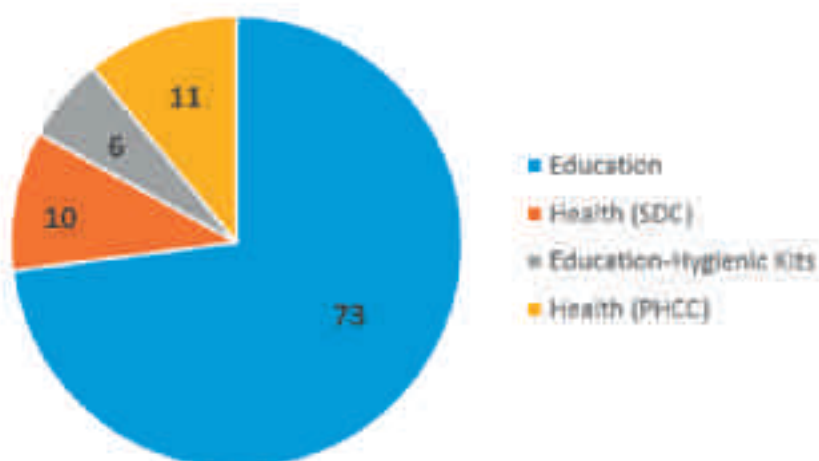
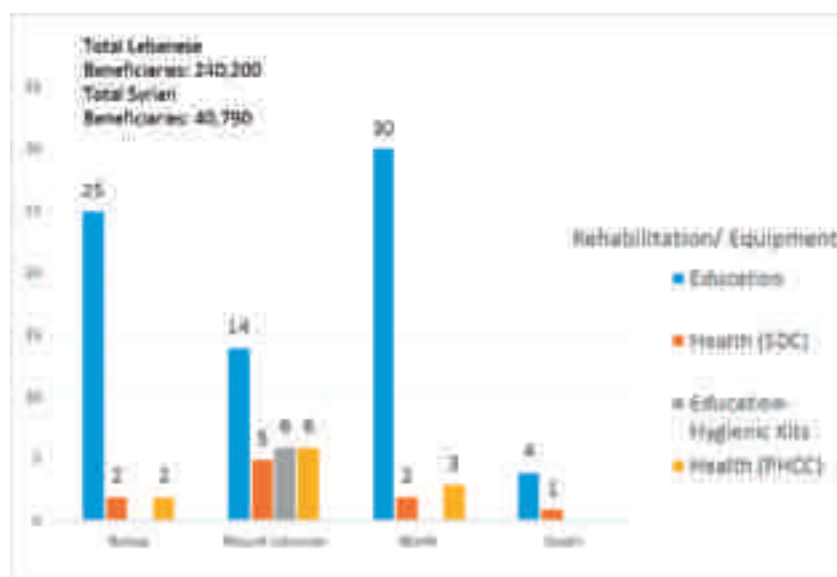


Projects Implemented to support Livelihood (a total of 29 projects):
distribution by geographical area and category





Projects Implemented to support Education & Health (a total of 100 projects):
Distribution by geographical area and category



Mains orientations of LHSP in 2015:

The LHSP will continue to assess priority needs based on a participatory approach, will put in place an integrated plan targeting the most affected communities and will continue to develop the Maps of Risks and Resources (MRR) that were launched at the end of 2014 in a number of host communities.

The LHSP will continue to implement projects to respond to priority need that were identified in light of the assessment of needs that was conducted in full cooperation with local stakeholders and relevant government entities.



LAND-USE & ENVIRONMENT

The Land-use sector includes three disciplines:

1. Land use planning and urban development
2. Environmental and tourist projects
3. Cultural heritage and urban development

1. Land-use Planning and Urban Development

a) Overview:

1-A-1) Legal Framework:

Law 5/77 of January, 31, 1977 establishing the Council for Development and Reconstruction (CDR), in its article 3, clause 4, states that the CDR "shall develop the draft of a general guiding framework for urban planning and refer it to the Council of Ministers for approval."

The Urban Planning Law (96/83), of September 9, 1983, in its article 4, states that the guiding plans and detailed regulations for cities and villages shall be developed and incorporated in the Comprehensive Land Use Plan.

1-A-2) Current Urbanization Situation:

In the seventies, during the Lebanese Civil War and thereafter, Lebanon witnessed an unprecedented urbanization activity, in the absence of control and regulation mechanisms. This had led to the creation of undesired outcomes:

- Random urbanization along the main axis and in the suburbs of large cities
- Negative influence on natural and archeological sites
- Expansion of licensed and unlicensed quarries
- Deterioration of the quality of water and pollution of rivers and groundwater
- Trespass to agricultural land, coastlines, and important tourist sites

Immediate remedies are required to limit the negative effects caused to economic and

social growth in Lebanon, in the presence of compelling factors, most importantly the following:

- Decrease in the financial capabilities of the public sector and the priority given to reduce public debt
 - The globalization and the new economic laws that countries should comply with if they wish to be part of international markets
 - Increased interest in environment and heritage, which started during the nineties and provided a motive towards rationalizing the use of natural resources and exerting bigger efforts to give focus more on heritage
- Hence, the current phase is considered as a phase to rationalize the use of resources, cut public expenditure and enforce control mechanisms.

1-A-3) Preparation of a Comprehensive Land-use Plan– National Future Perspective:

Based on the above, the CDR prepared a Comprehensive Land-use Plan in cooperation with the General Directorate of Urban Planning. The plan that was reviewed between 2002 and 2004 outlined major topics, such as environment and natural resources, population growth and urban development, transportation, service projects and large constructions, agricultural lands, industrial zones, cultural and historical heritage elements, and other factors.

The Plan tackles these topics from a comprehensive strategic perspective and with a scientific and objective approach that takes into consideration the characteristics of the Lebanese society, with a view to shape a long-term ambitious and integrate division about the future of

the country land. This vision is meant to constitute the general framework of the urban planning policy and the unified geographical reference for projects and investments in different sectors.

1-B) Achievements to Date:

1-B-1) Comprehensive Land-use Plan:

The CDR prepared in the years 2002 to 2004 the comprehensive Land-Use Plan in collaboration with Dar al Handassah (Sha'ir and Partners) and the Institute of Regional Planning of Ile de France (IAURIF).

The CDR also organized in 2005 a campaign aiming at circulating this Plan to a large number of public administrations, central and regional institutions, universities, civil society organizations, the Syndicates of Engineers and Architects of Beirut and Tripoli and international financing institutions.

The Plan was approved by the Higher Council for Urban Planning and the CDR. In September 2005, the Plan was referred to the general secretariat of the Council of Ministers. Subsequently the Plan was presented to the Council of Ministers accompanied by a draft law.

The decree (3366) approving the Plan was issued on June 20, 2009, based on the approval of the Council of Ministers of April 2, 2009. Below are outlined the main points covered by the decree:

1) Defining the general land-use orientations in tables annexed to the decree. The General Directorate of Urban Planning has to consider these when studying or modifying the master plans and detailed regulations for cities and villages. These orientations took into consideration the land nature and characteristics and the consequences of its use.

2) Forming an administrative committee headed by the president of the Higher Council of Urban Planning and com-



posed of delegates from the following ministries: Public works and transportation, Environment, Culture, Interior and municipalities, Energy and water, Agriculture, Industry, Economy and trade, Finance and Defense and the CDR. The committee is responsible, among other things, for monitoring and evaluating the Plan.

1-B-2 Terms of reference for the Lebanese Coastline Master Plan: the Council of Ministers commissioned the CDR to raise funds to develop the study of the Lebanese Coastline Master Plan. Therefore, the CDR, coordinated with several concerned public administrations, among which the following ministries: Environment, Agriculture, Tourism, Public works and transportation (the General Directorate of Urban Planning and the Directorate of Transportation), in addition to the Directorate General of Antiquities and the Orders of Engineers and Architects of Beirut and Tripoli. Moreover, several international institutions that constitute potential donors were contacted to develop the required study.

1-B-3 Local Development Support Project in North Lebanon (ADELNORD): The CDR was commissioned to implement ADELNORD in North Lebanon with a grant from the European Union. In 2010, priority projects related to agricultural infrastructure were identified as well as the clusters in which local development projects will be implemented through a participatory approach. This project also includes the development of a comprehensive plan for the clusters, in partnership with local authorities and civil society bodies, with the support of ADELNORD's technical support team and under the supervision of the Economic and Social Fund for Development (ESFD). Based on this plan, priority projects that will be implemented by local authorities and funded by ADELNORD were agreed upon.

Please review the details of this plan in the Agriculture Sector section of this report and on the website: www.cdr-adelnord.org. Contracts were signed in 2011 to outsource the studies and the supervision of agricultural infrastructure projects. These projects were distributed into 6 groups according to the type and geographical location of the site works. In 2012, the EUR 9,3 million site works were outsourced. In 2012 and 2013, 50% of site works were completed and delivered as interim deliverables.

1 – B – 4) Natural Regional Park projects: the Comprehensive Land Use Plan recommends the creation of natural reserves (Natural Regional Park). These are projects prepared by a group of neighboring municipalities which altogether agree on a development charter that balances between non-polluting and non-harmful economic activities and a moderate and high-quality urban development and on practical regulatory procedures, all of which aim at preserving the natural environment. In this context, the CDR is coordinating with municipalities and associations which have started to take an initiative in this direction (Al Juma and Jurd Al Qaytaa Municipalities Unions and Qoubayet Municipality in Akkar) in partnership with Mada association, the Union of the North Metn Municipalities and IAURIF.

In the context of supporting the creation of natural reserves, and in the absence of a legal framework that governs creating and managing such zones, the technical assistance team for the ADELNORD project, funded by the EU, was entrusted by the CDR with the task of preparing the legal framework draft, after the terms of reference were identified in coordination with the Ministry of Environment (MoE). The ADELNORD team completed this draft law and the CDR referred it to the MoE. The draft law incorporated its draft imple-

menting decrees and a legal text proposed to amend the draft decree on natural reserves in Lebanon that was approved earlier by the Council of Ministers. The MoE referred these texts to the relevant joint parliamentary committees, which approved them and referred them for approval in the next parliamentary plenary session.

1-B-5) Preparation of common methodology to study the strategic regional development plans: After several international organizations expressed their willingness to finance regional developmental plans studies, and in order to consolidate the work methodology, the CDR elaborated in 2011, in collaboration with the Ministry of Interior and Municipalities and in coordination with administrations involved in the development sector, a common methodology that will be adopted in the preparation of such plans. This methodology was adopted in the preparation of tender documents related to the study of the sustainable strategic plan for Tyre and Akkar.

1-B-6) Strategic Regional Developmental Plans:

The CDR participated in the elaboration and preparation of sustainable and comprehensive developmental plans for the regions of Fayhaa and Tyre.

- In Fayhaa region: The Union of Fayhaa cities worked on the elaboration of a sustainable strategy for its cities with the support and financial contribution of several local and international parties. A team of several experts was commissioned to elaborate this plan in collaboration with all central and local departments and civil society bodies. The CDR participated in the discussion of this plan within the Advisory Committee that was formed for this purpose. This plan resulted in a list of pri-



ority projects. The French Agency expressed its willingness to finance feasibility studies for these projects as a preparatory phase for financing a number of them at a later stage.

- In Tyre: The Tyre Municipalities Union - in cooperation with and the support of French PACA region-conducted several workshops designed to train and raise the awareness of local electors about the importance and the content of Tyre strategic plan. The CDR, in cooperation with the Tyre Municipalities Union, outsourced the plan preparation task to the Consultation and Research Institute (CRI)/Habib Debs/ECODIT/IAURIF. The development of the plan started in June 2013.

- In Akkar: Within the framework of ADELNORD Project funded by the EU, the CDR commissioned the technical support team to put in place a Strategic Sustainable Development Plan for Akkar. The strategy was initiated by the end of 2012. In April 2013, a first workshop was conducted to launch the Strategy and the data collection process.

1 – B-7) Preparation of a Work Paper on Real Estate policies in Lebanon:

The current situation and high prices of the real estate market in Lebanon impede and complicate the implementation of general real estate policies. Therefore, it has become necessary to tackle the topic of real estate policies in Lebanon in order to propose practical procedures that would improve and reform the real estate situation. To that end, a study was conducted to analyze the situation of real estate in Lebanon in cooperation with the CMI (Centre de Marseille pour l'intégration en Méditerranée), specialized in urban development studies

and research in the Mediterranean. Based on the findings of this study, recommendations and procedures were proposed to improve the situation. This study will pave the way for discussing this topic with line administrations in Lebanon with a view to approve any procedure or regulation that would reform the fiscal real estate sector, include the rental of apartments in the housing policy, help low-income individuals in finding suitable lodging, and rationalize the infrastructure financing to serve residential areas.

1-C) Work Progress during 2014:

During 2014, the CDR continues the following activities:

1) Pursue fundraising to elaborate the study of the Lebanese Coastline Master Plan.

2) Pursue the implementation of the ADELNORD project on "the Support to Local Development in the North of Lebanon", funded by the EU: in 2014, almost 100% of the total planned activities focusing on agricultural roads and irrigation canals were completed as interim deliverables. Final works are expected to be delivered in 2015.

3) Pursue the implementation of the Tyre Sustainable Development Plan, funded by the French Development Agency and implemented in close collaboration with the Union of Tyre Municipalities and civil society organizations. After completion of phase I (data collection) by the Consultation and Research Institute (CRI) Habib Debs/ECODIT/IAURIF, SWOT analysis workshops were conducted in April 2014. And in September 2014, a workshop on the definition of vision, mission and priority development axes was held. A workshop to discuss the draft plan is scheduled for March 2015.

4) Continue the preparation of the Akkar Sustainable Strategic Plan with a financial assistance from the European

Union: Following completion of Phase II SWOT Analysis Report, roundtables of local concerned committees were held in January 2014 to discuss the report.

A workshop was also organized in April 2014 at the location of the Municipality of Halba to discuss the Plan Phase III (Mission, Vision, and Priorities). The Consultant completed the draft plan, which is scheduled for discussion with local authorities and civil society during 2015.

1-D) Projects under preparation:

- Preparation of Lebanese Coastline Master Plan: The preparation of a master plan for the Lebanese coastline is one of the major land-use projects that the CDR is planning to initiate in collaboration with the Ministry of Environment and the Ministry of Public Works and Transportation. Fundraising for this study is underway and is expected to be finalized during 2014.

- Update of Comprehensive Land Use Plan: The Comprehensive Land Use Plan dates back to 2004 and was approved by a decree issued in June 2009. This ten-year old plan however needs to be updated. In 2015, the CDR hopes to initiate the preparatory activities to update the Plan, in collaboration with relevant authorities (in particular the Directorate General for Urban Planning).

- Preparation of Habitat III country report - within the context of Lebanon's participation to the United Nations Conference on Housing and Sustainable Urban Development. The Lebanese Government received an invitation to participate in Habitat III Conference that will take place in Quito, Ecuador, from 17 – 20 October, 2016. The process towards Habitat III includes the elaboration of a national report on housing and sustainable urban development challenges faced by Lebanon. The CDR will join efforts with the UN-Habitat and government stakeholders to prepare the report and carry out the necessary preparatory activities.



2. Environmental and tourist projects

Main achievements until 2014 in contracts signed before 2014

The CDR Planning and Programming Administration - in collaboration with other CDR administrations, seeks funding to finance projects that have potential environmental, economic and social impacts.

The Environmental Fund for Lebanon (EFL) is a EUR 8.5 million program funded by the German government. The Fund is managed by the German Agency for International Cooperation (GIZ) in collaboration with the Ministry of Environment and the CDR. An administrative committee composed of representatives of the Ministry of Environment, the CDR, The Federation of the Chambers of Commerce, Industry and Agriculture, the Lebanese Banks Association, the Lebanese Environment Forum and the German Agency for International Cooperation (GIZ), was formed to set out the action plan of the Fund and monitor its performance.

The EFL aims at reducing environmental risks and economic impacts in areas affected by the Israeli 2006 war and in other underserved areas in Lebanon. It also aims at supporting innovative initiatives in private sectors, which are likely to produce clear environmental and economic benefits. In addition, the Fund provides training opportunities to develop local capacities in order to create a mechanism for a sound local management of natural resources.

Funds worth of EUR 3 million were invested in 16 local projects, covering topics ranging from sound waste management to rehabilitation of land, forests, and natural reserves damaged by the war of July 2006. Also an amount of US 1,8 million was allocated for 6 projects aimed at addressing the issue of climate change adaptation in the North of Lebanon, and another

amount of US\$ 1,1 million was granted to 8 projects aimed at reducing pollution caused by the industrial wastewater discharged by private companies in Keserouan, Litani Basin and the North of Lebanon.

The Initiatives funded by the Environmental Fund in North Lebanon contributed to addressing climate change through:

- Forest protection and sustainable development
 - Adopting drip irrigation and biological insect control in fruit trees,
 - Rainwater harvesting;
 - Reducing water consumption and water wastage in resorts frequented by tourists;
 - Protecting the economic infrastructure of the Lebanese coastline from natural hazards;
- With regard to initiatives, aiming at reducing pollution caused by the industrial wastewater discharged by private companies, the following industrial sectors were targeted:
- Foodstuffs and beverages;
 - Textile manufacturing;
 - Paper industry;
 - Chemicals;
 - Non-metallic mineral products (decorative stone saws);
 - Basic metals and metal products;

Also, the Fund created a mechanism for the implementation of environmental projects such as eco-tourism projects, cleaner production, and organic agriculture, all of which have potential income generation and could serve as examples to achieve pilot environmental projects. The Fund demonstrated the success of local environmental action by cooperating with municipalities that showed a high level of seriousness in the implementation and follow up of projects.

The Fund prepared a research paper regarding the general policy that must be adopted to achieve environmental commitment and manage liquid industrial waste. The objectives of such policy emphasized the following:

- Situation analysis of current liquid industrial waste treatment
- Reviewing environmental laws and regulations that regulate liquid waste treatment in general, and liquid industrial waste and their discharge in particular
- Assessing the responsibilities and capabilities of stakeholders regarding environmental commitment and all processes and procedures related to treatment stations;
- Determining and drafting recommendations to move forward in achieving the environmental commitment of the industrial sector

It is worth noting that the Environmental Fund sought to shift from a research paper on the general policy of liquid industrial waste management and environmental commitment to a work plan for liquid industrial waste management, to define priority measures and required resources to address the issue of liquid industrial waste management in Lebanon.

In parallel to the provision of financial assistance to a number of projects aiming at reducing industrial pollution, the EFL organized an integrated program aimed at building the capacities of institutions involved in the reduction of industrial pollution including private industrial enterprises and concerned public administrations, within the scope of supporting the Ministry of Environment in the preparation of a national program for industrial pollution reduction. This program carried out a number of activities and organized workshops on industrial waste management.

In the framework of environmental tourism, the Council for Development and Reconstruction (CDR), in cooperation with the Ministry of Tourism, executed a tourism and development mas-



ter plan for Zahle, Baalback, Becharre and the Cedars with a funding from the Japanese government. The main purpose of the study is to determine the basic needs for tourism and eco-tourism development and provide feasibility studies for pilot projects designed to develop mountainous and rural regions, to be implemented at a later stage. The cost of this study amounted to US\$ 2.5 million. Since 2010, the CDR has started implementing the Project to Support Local Development in North Lebanon (ADELNORD), financed by the EU Grant Agreement (ENPI/2008/019-623). The Agreement includes an environment component, of which the following was completed up until 2014:

1- Within the framework of the initiative aimed at putting in place a sustainable strategic plan for Akkar, the ADELNORD project created a standardized methodology to draft the terms of reference of the regional development plans studies, in collaboration with the Ministry of Interior and Municipalities and in cooperation with the administrations engaged in the development sector, as a preliminary step to the preparation of the tender document pertaining to the sustainable strategic plan for Akkar.

2- Within the framework of the initiative aimed at providing technical support to create a national park in the mountainous areas of Akkar, the project put in place a tender document pertaining to a technical study for the creation, management and regulation of natural reserves in Lebanon, in coordination with the Ministry of Environment. Because national parks are considered natural reserves, these steps will be preliminary to the provision of technical support

for the creation of a national park in Akkar. In 2012, the project launched the said study which culminated in a detailed technical report and draft a law on natural reserves, approved by the Ministry of Environment on 2013 and referred to the concerned parliamentary committee for review and approval.

3- Within the framework of the initiative aimed at fire suppression and forest protection and management, the project put in place in 2012 two plans for the management of the forests of, Andkit-Akkar and Safira-Dannieh that culminated in the elaboration of terms of reference for forest management including pruning. This task was carried out by experts specialized in forest and shrub land management and in fire suppression, in close cooperation with the municipalities and the shrub land stations of Akkar and Dannieh and with the Ministry of Agriculture.

In 2013, the CDR submitted to the Ministry of Agriculture a final report containing two plans for the management of the forests of Andkit-Akkar and Safira-Dannieh and two terms of reference, awaiting approval of the Ministry of Agriculture.

With regard to the environmental impact assessment and strategic environmental assessment, the CDR, until the end of 2011, required the preparation and outsourcing of environmental impact assessments and strategic environmental assessments as a compulsory condition for many projects, in accordance with the standards of the World Bank, the EU, and other scientific international references. Now with the issuance of decree 8213 of May 24, 2012 on "the Strategic Environmental Assessment of Draft Public Policies, Plans and Programs" and decree 8633 of August 7, 2012 on "Environmental Impact Assessment Rules", strategic environmental assessments and environmental impact assess-

ments became a binding obligation for all projects referenced in the said decrees.

The CDR participated in the elaboration of national environmental reports, together with donors, ministries, and other authorities, by attending workshops and round table discussions, and proposing the necessary recommendations:

- The "Millennium Development Report 2010 for Lebanon issued by the UNDP;

- The Country Environmental Assessment report issued by the World Bank in cooperation with the Ministry of Environment;

- The Lebanon 2012 National Report to the United Nations Conference on Sustainable Development (UNCSD), also known as Rio+20, in cooperation with UNDP, ESCWA, and relevant ministries, as a preparatory phase for attending the Conference held in June 2012; Through coordination committees, or under financial assistance agreements, the CDR participated in the follow-up of several environmental programs executed by the MoE and UNDP. These projects tackled the issues of biodiversity, climate change, and institutional capacities strengthening.

Work progress in 2014:

Within the framework of the Environmental Fund for Lebanon project funded by the Government of Germany, the Fund provided the required technical assistance to industrial Lebanese businesses, in the form of grants. The purpose of this technical assistance is to elaborate preliminary environmental studies to define investments needed to lower industrial pollution and obtain soft loans to implement them. So far, the Fund has prepared detailed environmental studies for thirteen businesses to help them identify and treat the sources of industrial pollution caused by the production process, and propose a prelimi-



nary economic feasibility study for each of the targeted businesses. The technical support of the Fund is also open to any industrial business in Lebanon seeking to develop preliminary studies for reducing industrial pollution and mitigating its impacts.

The CDR continued to implement the ADELNORD project, funded by the EU, especially its environmental component. These are the highlights of the program:

1- The project started to elaborate a sustainable strategic plan for Akkar, Hermel and Dennyeh, in cooperation with a team of experts specialized in environmental sciences, economics, urban planning and social development, assigned by GFA-ELARD, based on a terms of reference prepared by the project in 2011, in coordination with the Ministry of Interior and Municipalities and in cooperation with public departments involved in the development sector. Within this scope, the Chapter on Diagnostic and the draft plan have been completed in cooperation and communication with local authorities.

2- The relevant parliamentary committees approved the Draft Law on Natural Reserves that have been prepared by the CDR and referred by the Ministry of Environment. In 2014, the CDR through ADELNORD, completed the preparation of the Draft Implementing Decree of the Law on Natural Reserves and submitted it to the Ministry of Environment.

3- Within the framework of Fire Suppression and Forest Protection and Management, the CDR initiated the Phase II of this mandate, upon the request of the Minister of Agriculture, in particular the following:

- 1- Implementation of a training program targeting forests guards and local activists;
- 2- Supply of forest management tools and supplies;
- 3- Propose a follow up

mechanism to implement the two management plans of the Forest of Andkit and Safira.

4- In 2012, according to decree 8213 issued on May 5, 2012 regarding "Strategic Environmental Assessment for Draft policies, Plans and Programs in the public sector", and decree 8633 of August 7, 2012 regarding the "Environmental Impact Assessment Rules", the CDR specify these 2 decrees and their related requirements as mandatory points that should be described in the tender documents of all projects, in due course of law. The CDR is now in the process of preparing environmental impact assessments for many infrastructure projects for schools, hospitals, roads and sewage water refinement stations etc.... Also the CDR is preparing strategic environmental assessments of the sustainable strategic plan for Akkar, Hermel and Dannieh, as part of the ADELNORD project, and the sustainable strategic plan for Tyre.

In 2014, by participating in coordinating committees, the CDR continued the execution of works related to:

- The Integrated Waste Management in Baalbek Caza project, funded by the Italian Agency and implemented by the Ministry of Environment. The review of the first draft of the Master Plan for the solid waste sector in Baalbek-Hermel is underway along with the preparation of the tender documents to outsource works and executive tasks. It is worth noting that an environmental impact assessment of the project was put in place.
- The "Demonstrating & Promoting best techniques & practices for reducing health care waste to avoid environmental releases of dioxins & mercury" project, funded by GEF/UNDP and implemented by the Ministry of Environment. This project was completed in 2013 and resulted in a series of environmental

standards that were adopted by the MoE and that are specified as mandatory requirements for the construction of new or future hospitals.

- The "ENPI Horizon 2020 Capacity Building" project, funded by EU/MAP and implemented by the Ministry of Environment, in cooperation with the CDR. The CDR participates in coordinating committee meetings and in workshops on the management of solid waste, wastewater and industrial emissions; it also suggests Lebanese representatives from the private sector and the civil society, involved in the previous topics, in order to build their capacities and increase the number of local specialists in these fields.

The CDR continues to follow-up on environmental projects executed by MoE and funded by the United Nations Development Program (UNDP) in the following fields:

In management:

- Institutional support for MoE,

In preserving natural resources:

- The Small Grants Program funded by the Global Environment Facility (GEF), which provides financial assistance to small pilot projects managed by civil society organizations.

In air pollution reduction:

- Institutional Support for the Ozone Office located at the Ministry of Environment in Lebanon (Phase Five),
- The CEDRO project targeting the energy efficiency and renewable energy applications for public sector buildings and facilities (in the South, Bekaa and Akkar).

- The "Toward Sustainable Energy Production" project

In nature preservation:

- The project to support the National Forestation Plan
- The Migratory Birds Project



- The Conservation of Medicinal Herbs Project

- The Conservation of Forest Resources Project

The CDR is in the process of awarding a project for establishing a wholesale fruits and vegetables market in Tripoli, and a project for rehabilitating the slaughterhouse of Tripoli.

Major projects and activities that CDR will pursue in 2015:

- Elaborating a sustainable strategic plan for Akkar, Hermel and Dannieh, as part of the ADEL-NORD project

- Elaborating a sustainable strategic plan for the district of Tyre
- Performing a strategic environmental assessment for the two above plans

- Coordinating with the MoE to approve and put into effect the Draft Law on Natural Reserves and its draft implementing decree

- Coordinating with the MoA regarding the approval and ratification of the two management plans for Andkit in Akkar and Safira in Dannieh, and regarding the terms of reference pertaining to forest management -including pruning-, fire suppression and forest protection and management.

The Forestation Project in West Bekaa, the creation of local job opportunities and awareness activities; the project aimed at creating an eco-tourism strategy for the fishing industry on the Lebanese coastline; the project aimed at controlling natural resources in Lebanon; the self-assessment project in preparation for the Third Conference on Climate Change and for the national climate change report; in addition to the project on the provision of institutional support to the Ministry of Environment.

The CDR will also continue to follow up on the preparation of environmental projects that will

be executed in 2015 by MoE and will be funded by UNDP, among which:

- The Third National Communication project to the UNFCCC

- The Capacity Building Project for Reducing Emissions in Lebanon

- The National Work Program to Introduce Climate Change to Development Works in Lebanon.

The CDR will also continue to follow up on the preparation of environmental projects that will be executed in 2015, among which:

- Facilities Environmental Commitment project funded by the World Bank

- A second project for Facilities Environmental Commitment funded by the World Bank

- The Biodiversity Project funded by the GEF

- A project for climate change funded by the EU

- A second project for climate change funded by the GEF

- Project for the Protection of the Ozone Layer funded by the Montreal Protocol

- Project to support a Management Unit for the project aimed at reducing industrial pollution in Lebanon

- Support to the Lebanese Environmental Pollution Abatement Project

- Support to the Syrian Crisis (Sustainable Energy and Water)

- Sustainable Land Management of Qaroun Watershed

- Project to fund the 6 Cycle Project funded by the GEF

1- Cultural Heritage and Urban Development

Cultural Heritage Preservation and Urban Development Project:

In coordination with the Directorate General of Antiquities and concerned municipalities, the Council for Development and Reconstruction (CDR) launched a project on the preservation of cultural heritage and urban development in five historical cities in Lebanon: Tripoli, Byblos, Sidon, Tyre and Baalback. In order to improve the historical infrastructure and archaeological sites in these cities, the project aims at a) creating an adequate environment to achieve local economic development and b) providing the required technical assistance to improve the conservation, regulation and management of Lebanon's cultural heritage.

The components of the project are:

- Renovation of the historical city centers and part of their Infrastructure: This component includes the renovation of the historical areas in the five target cities. The project includes the following works: renovation and creation of public squares and green spaces; renovation of certain markets and pedestrian zones; renovation and protection of certain historical buildings and determining their usage; support and promotion of economic tourist activities; assistance in the renovation of a number of private traditional homes; organizing traffic in the surroundings of historical areas and establishing car parks. In addition, the infrastructure will be renovated in a number of streets in these five cities, to install drinking water networks and renovate wastewater networks.

- Protection, Maintenance and Management of Archaeological Sites: This component deals with the development



of archeological sites in Baalback, Sidon and Tyre and include the following activities: Research and documentation regarding archeological sites, restoration and reinforcement of several archeological monuments including Bacchus and Jupiter temples in Baalback and the land castle in Sidon, management of archeological landmarks, protection and preparation of sites for receiving visitors, such as the creation of visitor and information centers.

- Technical Assistance for Institutions involved in the Project's implementation: This includes all activities that contribute to the improvement of the performance of targeted institutions to ensure the sustainability of the project. These institutions are: the municipalities of the five cities, the Directorate of Antiquities and the Directorate of Urban Planning. This project is vital for the revival of tourism in these cities and the enhancement and upgrading of associated geographic, economic and social infrastructure which will eventually lead to local economic development and creation of new job opportunities.

The project faced many obstacles and challenges which hindered its execution within the initial planned deadlines, including but not limited to the following:

- The security situation in Lebanon
- Increased construction costs
- Change in municipality structures during the term of the project and the necessity to re-explain the projects and make several amendments
- Change in cabinet and parliamentary structures during the term of the project and the necessity to re-explain the projects and make several amendments
- The presence of several trespasses on the work sites which are often hard to remove
- People are sometimes

resistant to change

- The delay in the execution of all clauses of the Additional Funding Agreement, awaiting its approval by the Parliament

- The security situation that hindered the arrival to Lebanon of the foreign committed companies and hindered the execution of works as scheduled. Despite the many challenges encountered and following the completion of the first phase, the project surveyed the opinions of the citizens and visitors of these five cities, the concerned ministries and the municipalities. As shown by the surveys, the importance of the project lies in improving the living, social, and environmental conditions in the targeted regions. It was also noticed that there is a growing awareness in communities regarding the importance of preserving cultural heritage.

The CDR raised additional funds from the World Bank and the French Development Agency to complement the projects prescribed in the Initial Funding Agreement. The CDR is currently funding the active projects, awaiting meanwhile the approval of the additional loan by the Parliament.

In an attempt to develop and widen the scope of the experience of the Cultural Heritage Preservation and Urban Development Project, the CDR is currently negotiating with donors to raise the funds required to execute additional works in the five targeted cities and to widen the scope of the project to include other cities in Lebanon.

Main Achievements (1992-2013):

Funds were raised to carry out the activities of the project as follows:

- A US\$ 31.5 million loan agreement was concluded with the International Bank for Reconstruction and Development (IBRD). The agreement was referred by the Council of Min-

isters by Decree 10858 of September 9, 2003 and ratified by the Parliament pursuant to Law 555 of 31/01/2004.

- A EUR 12 million loan agreement was concluded with the French Development Agency. The agreement was referred by the Council of Ministers pursuant to Decree 11163 of 14/10/2003 and ratified by the Parliament pursuant to Law 556 of 30/01/2004.

- On May 3, 2006, the CDR signed a EUR 10 million implementation agreement, for the part allocated in the Italian Protocol for the cultural heritage project.

- On November 28, 2007, the CDR signed EUR 500,000,000 grant agreement with the French Development Agency, to support the Directorate of Antiquities. The agreement was referred by the Council of Ministers pursuant to Decree 1058 of November, 24 2007.

- On October 7, 2008, the CDR signed a grant agreement with the Italian government stipulating the allocation of an amount of EUR 2.2 million for the Cultural Heritage project.

- A EUR 21 million additional loan agreement was signed with the French Development Agency and referred to the Council of Ministers and the Parliament for approval. The agreement was referred by the Council of Ministers by Decree 10858 of 09/09/2003 and ratified by the Parliament by Law 555 of 31/01/2004.

- A EUR 27 million Additional Fund Agreement was signed with the International Bank for Reconstruction and Development, and was referred to the Council of Ministers and the Parliament for approval. The agreement was referred by the Council of Ministers by Decree 10858 of 9/9/2003 and was rati-



fied by the Parliament by Law 555 of 31/01/2004.

The CDR completed in 2002 the detailed primary studies of the project in particular the studies related to five targeted cities: Tripoli, Byblos, Baalback, Sidon, and Tyre.

- The CDR created a project management unit (PMU) which consists of consultants responsible for the follow-up and management of the project. For this purpose, the CDR recruited a multi-specialty team composed of a procurement expert, an architect specialized in restoration, a civil engineer, a sociologist and an archeologist who will provide oversight over the works associated with the Directorate of Antiquities.

- The CDR created local municipal management units in the five targeted cities, composed of engineers, specialists, sociologists and economists. The CDR recruited ten specialists who will provide oversight over the project, in coordination with relevant municipalities in the five cities.

The specialists carry out the following tasks:

- a. supervision of works;
- b. coordination and cooperation with municipal, administrative and technical authorities, and with the Directorate General of Urban Planning, the Directorate General of Antiquities, the offices of the Ministry of Tourism and other public institutions involved in the implementation of the project in the five cities;
- c. Coordination with the citizens, local communities and local and civil society organizations during different phases of the project.

- In 2004, the CDR completed the detailed studies and tender documents related to the first part of the works for the five

cities and amounting to US\$ 12 million. This enabled CDR to launch a call for bids and award the contracts related to the renovation and restoration works in the five cities.

- The first phase site works started in the summer of 2005 in Tyre, Tripoli, Baalback, Byblos and Sidon, consecutively.

- Supervision contracts for the five cities were awarded in the summer of 2005.

- The CDR signed a contract on the assessment of indicators related to the economic, touristic and social impact assessment of the project in the five cities at the end of 2005.

- During 2006, the CDR awarded to consultancy firms the elaboration of detailed studies and tender documents of the second phase works in Tyre, Tripoli, Byblos and Baalback. This enabled CDR to launch, in 2007, the tendering process and to award the relevant infrastructure and restoration works.

- In February 2007, the renovations of the western coastal road in Tyre were wrapped up.

- Consultants completed the traffic plans, the traffic flow organization and the adequate parking plots for a number of historical cities.

- In 2007, a contract was awarded to provide oversight over the environmental impact plan in the five cities.

- In the beginning of 2007, the renovations of the facades in the northern souks (Group 1) in Tripoli were wrapped up.

- In May 2007, works to relocate the inhabitants of Bloc A in Khan Al Askar in Tripoli were wrapped up, followed by the completion of works to relocate the inhabitants of Bloc B in February 2008. This resulted in the relocation of most of the inhabitants of Khan Al Askar to the apartments allocated to them in December 2009.

- In August 2007, the contract with the South for Construction to execute the renovation works in the souks of the old city in

Sidon (phase 1 – Bab As-Saray square and the tourist passageway) was terminated. The remaining works were incorporated in the project on the renovation of the old souk (phase 2), the electrical works and the renovation of two old buildings in the old city.

- By the end of 2007, the renovation of mud houses in Al Qalaa neighborhood in Baalback (phase 1), the renovation of roads, public squares and infrastructure in Byblos (phase 1) and the renovation of facades in Al Swayqa in Bab AtTabbaneh in Tripoli were wrapped up.

- During 2008, detailed studies for the renovation of the archeological sites in Baalback and Tyre- phase 1 were elaborated.

- In May 2008, the renovation works for the facades in the northern markets in Tripoli (group 2) and the phase 1 works in Tyre (the cultural path near the archeological site) were wrapped up.

- In August 2008, the renovations of roads, public squares and infrastructure (phase 2) started in Byblos.

- In August 2008, the renovations of the facades of the northern markets in Tripoli were wrapped up.

- By the end of 2008, the renovation of the foundation wall at Tyre archeological site was wrapped up.

- Detailed studies for the renovation of Tripoli Castle were elaborated.

- In 2006, the archeological map of Tyre was developed.

- The Technical Support Project for the municipalities of Tripoli and Tyre was launched.

- During 2009, environmental workshops were conducted in municipalities and attended by municipal employees, representatives of polluting industries, engineers and environmentalists etc... The purpose of the workshops was to increase awareness and improve performance in the field of environment preservation.



- The study for the renovation project of Shqeef Castle in Arnoun - Nabatiyeh was elaborated.
- The renovations and restorations in the markets of the old city in Sidon (أسواق صيدا القديمة) (phase 1) were wrapped up.
- In May 2009, the restoration project for Al-Bawaba Square, Hamra Street, and Al-Jaafarih region was launched.
- In April 2009, the renovation and restoration of the presidential wing at the Beiteddine Palace started and were wrapped up in July of that same year.
- In November 2009, the detailed studies for the renovation of the land castle in Sidon were prepared.
- In December 2009, the detailed studies for the restoration and renovation of Deir Al Qalaa in Beit Mery were put in place.
- In 2010, the restoration and renovation of Hammam Ezzeddine were wrapped up.
- In February 2010, the renovation of the Fishermen port and its seafront in Tyre started.
- In April 2010, the renovation works of the old city squares and seafront building facades of the old city in Sidon were launched.
- In May 2010, the renovation works of the tourist passageway, section 2, and the electric works in addition to the renovation of two traditional buildings in the old city were launched.
- In June 2010, the renovation works of the Tripoli Castle started.
- In June 2010, the renovation works of the infrastructure in Baalback and Tyre archaeological sites started.
- In September 2010, a contract was signed with the National Institute of Administration to provide training to the employees of the Directorate General of Antiquities.
- In October 2010, the renovation works of the Shqeef Citadel in Arnoun were launched.
- In October 2010, a contract was signed for the procurement of office furniture for the Direc-

torate General of Antiquities.

- In October 2010, the renovation works of Khan Al Askar started.
- In January 2010, delivery of the building intended for the relocation of the inhabitants of Bloc C in Khan Al Askar in Tripoli.
- In February 2011, office furniture was delivered to the offices of the Directorate General of Antiquities.
- In August 2011, the renovations of roads, public squares and infrastructure (phase 2) were completed in Byblos.
- In December 2011, office equipment was procured for the Directorate General of Antiquities.
- In November 2011, two vehicles were purchased for the Directorate General of Antiquities.
- In October 2011, a conference on "Tyre's history through archeology" was held in "Beit el Mamlouk" in Tyre, under the patronage of the Minister of Culture, and was attended by the Chairman of CDR and the French ambassador. International experts participated in the event.
- A training session was conducted for the employees of the Directorate General of Antiquities.
- Detailed studies for the renovation of the Shamaa citadel were formulated in July 2012.
- In August 2012, underwater archeological material was procured to the benefit of the Directorate General of Antiquities.
- In August 2011, the detailed studies related to the renovation of Khan Al Qishleh in Sidon and Baalback Saray were launched.
- Topographic supplies were procured to the benefit of the Directorate General of Antiquities.
- The technical assistance contract to the benefit of the Directorate General of Antiquities was signed, to select antique objects, organize these object labels and display them at the Tripoli Hall Museum in May 2012.
- In October 2012, the restoration of Khan El Askar was

wrapped up.

- The urban planning administrative support plan was completed.
- A call for tenders was released to outsource the renovations and restorations of roads, infrastructure, facades and car parks in Baalback historical city – Phase II (Section 1), awaiting the approval of the World Bank additional funds by the Parliament.
- Scientific reports were elaborated for the UNESCO World Heritage Centre, as part of the technical assistance prescribed in the Technical Agreement Contract signed to the benefit of the Directorate General of Antiquities.
- A call for tenders was released to outsource the restorations and renovations of the two historical sites of Baalback and Tyre, restricted to Italian contractors.
- A call for tenders was released to outsource the restorations and renovations of the historical Shamaa Citadel. Only one bidder submitted a proposal. The study was modified following the collapse of a part of the Citadel's tower and a new tender document was elaborated to release a new call for tenders.
- The Cultural Heritage Unit continued to provide technical support during the preparation of the detailed studies for the Archeology Museum in Sidon and during the commencement of site works.
- A contract was signed in April 2013 to outsource the renovation of ASNADMIR Mill in Tripoli and the Land Castle.
- The restoration and renovation of Khan Al Askar are underway.

- Execution of the additional works in the building intended for the relocation of the inhabitants of Bloc C in Khan Al Askar, and making repairs and altera-



tions to the buildings intended for the relocation of the inhabitants of Bloc A and Block B in Khan Al Askar in Tripoli.

- The restoration and renovation of Al Bawaba Square, Hamra Street and Al Jaafariyeh area are underway.

- The renovation of the Fishermen Port and its seafront in Tyre are underway.

- The team of the Management Unit of the Cultural Heritage project reviewed the study proposed by the Municipality of Byblos to build a parking lot in the city. The administrative file was prepared, as a preparatory step for the release of the call for tenders.

- Work progress in 2014:

- Oversight over the Environmental Impact Plan in the CHUD five targeted cities.

- Completion of the restorations and renovations of the Beiteddine Palace (water isolation).

- Continuation of restoration of the Shqeef Citadel in Arnaoun.

- Preparing to release a call for tenders to outsource the restoration of the Beit Mery archaeological site.

- Oversight over the infrastructure project in Baalback and Tyre archaeological sites.

- The Cultural heritage Unit team holds regular meetings with the stakeholders supervising the construction of the Beirut National Museum and providing technical support to the project.

- Release of a new call for tenders to outsource the restoration and renovation of Shamaa citadel.

1. Sidon:

- Continuation of the site works of the tourist passageway, phase II, and the electric

works in addition to the renovation of two traditional buildings in the old city.

- Continuation of the renovations of the old city squares and seafront facades of the old city in Sidon (works are inactive due to lack of funding).

- Preparing the tender document and the detailed studies related to Khan Al Qishleh renovation project, as a preparatory step for the release of a call for tenders.

- Continuation of Sidon's Land Citadel site works.

2. Tripoli:

- Continuation of the works for the renovation of the surrounding area of Al Burtassi mosque and Abu Ali River banks and construction of an awning above a section of the banks stretched within the old city.

- Outsourcing the guardianship and maintenance of Khan El Askar.

- Completion of Tripoli Citadel restoration works.

- Completion of the additional site works related to the relocation of Khan El Askar Bloc C, and repairs and modifications of Blocs A and B of Khan El Askar in Tripoli.

3. Tyre:

- Continuation of the renovation works at the fishermen port and its seafront in Tyre, and construction of fishermen building according to the modified design.

- A contract was signed to award the archeological site renovation works, Phase I.

4. Baalback:

- Continuation of infrastructure renovation at the archeological sites of Baalback and Tyre.

- A contract was signed to award the site works (Phase II works – Abdel Halim Hajjar and Saleh Haidar Streets) and commencement of site works.

- A contract was signed to award the archeological site renovation works, Phase I.

5. Byblos:

- A contract was signed to award the construction of a parking lot in the city.

Main Contracts signed during 2013:

The CDR signed the following contracts:

- Contract to outsource the site works at the city of Baalback – Phase II.

- Contract to outsource the construction of a parking lot in the city of Byblos.

- Contract to outsource the archeological projects in Baalback and Tyre – Phase II.

- Contract to outsource the oversight over Baalback site works – Phase II.

- Contract to outsource the oversight over the construction works of the parking lot in Byblos.

Main Projects under Preparation (2015 – 2016):

The CDR is currently preparing the following studies and projects:

- Plans related to social projects accompanying the CHUD project.

- Plans related to local economic development of the old souks in the CHUD five targeted cities.

- Tourism promotion plan for the targeted cities.

- Outsourcing of the restoration works at the archeological project in Deir El Kalaa.

- Outsourcing of the restoration works at Beiteddine Palace – Phase II.

1. Baalback:

- Release of a call for tenders to outsource the renovation of the Baalback Saray.

- Commencement of the restoration works at the archeological site -phase I.

2. Sidon:

- Release of a call for tenders for the renovation of Khan Al Qishleh.

3. Tripoli:

- Outsourcing of the detailed studies related to the renovation of Khan Al Saboun and



Property No. 131.

- Outsourcing of the detailed studies related to the renovation of the eastern facades of the Abu Ali River.
- Release of a call for tenders for the renovation of the facades, roads, and public squares in the northern and eastern souks, phase II.
- Commencement of sites works for the restoration of the ISNADMIR Mill.
- Completion of Abu Ali River sites works.

4. Tyre:

- Release of a call of tenders to outsource the completion of the Tyre southern costal roads site works.
- Release of a call for tenders to outsource the restoration of Tyre old souks.
- Commencement of renovation works of Al Bawaba Square and parking lots.

CHUD Main Projects Signed in 2014

Project	Estimated Value (USD)	Source of Funding	Scheduled Start	Scheduled Completion
Phase II works – Saleh Haidar Abdel Halim Hajjar in the City of Baalback	2,376,400	World Bank	10/11/2014	28/12/2015
Oversight over Phase II works in the City of Baalback	90,775	Local	10/11/2014	28/12/2015

Main projects under preparation 2015 – 2016

Project	Estimated Value (USD)	Source of Funding	Scheduled Start	Scheduled Completion
Construction of a car parking in Byblos	907,760	World Bank	1/4/2015	30/11/2015
Oversight over Phase III works in Byblos	45,388	Local funding	1/4/2015	30/11/2015
Restoration works at Baalback and Tyre historical sites – Phase II	4,487,000	Italy	15/04/2015	14/04/2017
Formulation of detailed studies and oversight over the renovation of Khan Al Saboun and Property No.131	350,000	French Development Agency	30/10/2015	1/7/2016
Renovation of Khan Al Saboun and Property No.131	5,000,000	French Development Agency	28/12/2016	1/8/2018
Formulation of detailed studies and oversight over the renovation of the two riverbanks of Abu Ali River, Tripoli	170,000	French Development Agency	30/10/2015	1/7/2016
Renovation of facades, roads, and public squares in Tripoli-phase II (parts 4,6, and 8)	5,500,000	French Development Agency	30/10/2015	28/04/2017
Renovation of facades, roads, and public squares in the northern and eastern souks in Tripoli –phase II (parts 5 and 7)	3,500,000	French Development Agency	30/10/2015	28/04/2017
Restoration of the two riverbanks of Abu Ali River	2,400,000	French Development Agency	19/12/2016	18/06/2018
Outsourcing the restoration of Shamaa Citadel	600,000 EUR	Italy	1/4/2015	31/03/2016
Restoration and renovation of Khan Al Qishleh in Sidon	2,250,000 EUR	Italy	1/7/2015	31/12/2016

Project	Estimated Value (USD)	Source of Funding	Scheduled Start	Scheduled Completion
Restoration and renovation of the Baalback Saray building	1,000,000 EUR	Italy	1/7/2015	30/06/2016
Formulation of detailed studies and oversight over the restoration of the old souks and the southern seafront in Tyre	150,000	French Development Agency	30/10/2015	3/9/2018
Restoration of old souks in Tyre	1,000,000	French Development Agency	5/9/2016	3/9/2018
Completion of the seafront in Tyre	1,200,000	French Development Agency	30/08/2016	27/02/2018
Restoration and renovation of Beiteddine Palace	1,350,000	Lebanon	1/1/2016	30/06/2017
Restoration works at the Beit Mery Historical Site		Lebanon		
Technical support to the donor to continue the works of the Archeology Museum in Sidon	4,400,000	Kuwait Fund for Arab Economic Development and Arab Fund for Economic and Social Development		
Excavations works at the National Museum of Beirut	750,000	Kuwait Fund for Arab Economic Development	15/04/2015	15/12/2015
Site works at the National Museum of Beirut	27,500,000	Kuwait Fund for Arab Economic Development	1/7/2017	30/06/2019
Douma Old Souks site works (restoration of building facades, public squares and infrastructure)	3,000,000	No funding		
Formulation of a detailed study pertaining to the restoration of Tebnin Citadel and its surrounding area		No Funding		
Restoration of Tebnin Citadel and its surrounding area		No Funding		



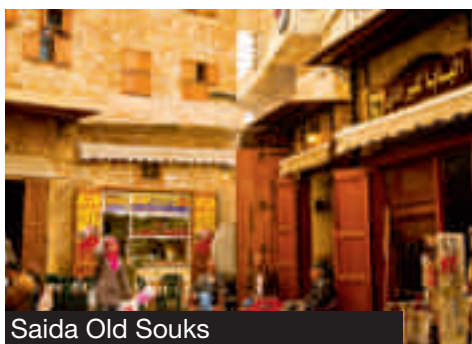
Tyre Vegetables Market



Tyre Syndicate Center for Fishermen



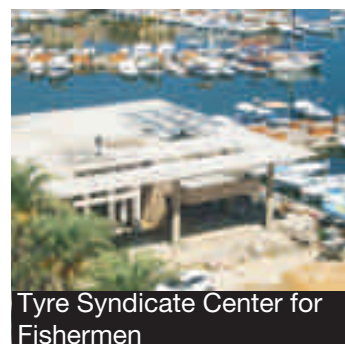
Aakar Agricultural Channel



Saida Old Souks



Jbeil Roman Path



Tyre Syndicate Center for Fishermen

WATER

Overview of the sector

At the end of the Lebanese war, existing drinking water facilities were composed of semi-complete networks in main cities and other smaller networks in the remainder of the Lebanese regions. The evident emergence of water insufficiency was accompanied by the exacerbation of the problem of underground and surface water pollution resulting from random wastewater discharge, yet threatening the environment and the health of the Lebanese population.

The insufficiency in drinking water supply that has ever since existed is caused by several reasons, mainly:

1. The increasing demand for water and the inadequate capacity of the dilapidated existing water supply network.
2. The increased water leakages and losses resulting from the old and dilapidated network.
3. Absence of means to protect water from pollution (random wastewater discharge, industrial and agricultural pollutants...)
4. Insufficiency of water and wastewater government spending, i.e. scant investment necessary to refurbish and modernize facilities and update them to the required service and environmental levels.
5. The absence of an adequate administrative and executive structure that could manage the urgent increasing needs for drinking water service and wastewater and apply new administration practices and modern water purification technologies.

To put up with such a difficult reality, the Lebanese government embarked since 1992 on the fol-

lowing:

- 1- Execution of urgent rehabilitation works for existing water facilities, networks and pumping and purification stations, and tackling all existing or upcoming problems.
- 2- Completion, expansion and rehabilitation of networks according to needs.
- 3- Update and increase water sources, limit water leakages and thus increase supply rate.

This sectoral action plan aims at completing the rehabilitation and expansion of drinking water systems servicing all Lebanese regions and increase water sources to put an end to the anticipated deficit through large-scale projects e.g the construction of dams and mountain lakes.

However, on the institutional level, the promulgation of Law 221/2000 was an essential step towards restructuring and modernizing both water and wastewater sectors; as it determined the water public properties (surface and ground) and assigned water administration (drinking water, irrigation, wastewater) to 4 public institutions (excluding the Litani river which remained under the management of the Litani National Authority to exploit its water for irrigation in South Lebanon and West Bekaa) into which it integrated all water departments, under the tutelage authority of the Ministry of Energy and Water.

In 2001, the boards of water institutions were appointed. In 2005, new regulatory and structural decrees were issued and put into effect in order to achieve many goals mainly: a) rehabilitation and improvement of the services of these institutions, b) expansion of their coverage area and c) maintenance of their administrative stability and financial equilibrium.

Acting along the same lines of the Lebanese government, the Ministry of Energy and Water commissioned a French company to study the feasibility of private sector involvement in the management of Beirut and Mount Lebanon Water Establishment. Concurrently, the CDR was charged with awarding contracts for the management of the other regional water establishments.

Main achievements in the sector (1992-2014)

At the end of the civil war in Lebanon, the water projects implemented by the CDR aimed at fulfilling national objectives, including but not limited to the following:

- Emergency rehabilitation program for water authorities (National Emergency Reconstruction Program – NERP – first year): At an estimated cost of US\$ 60 million, financed by the World Bank and the European Investment Bank. Its purpose was to rehabilitate networks and drinking water supply installations belonging to 19 drinking water authorities (formerly).
- Rehabilitation and expansion of drinking water treatment plants, pumping and chlorination stations in the regions: The program covered projects for the rehabilitation and expansion of seven main drinking water treatment plants in Zahle, Kfar Halda, Tripoli, Jbeil, Kousba, Ras el Ain and al-Bass (Sour). It also covered rehabilitation of 200 pumping stations located in all Lebanese regions. This project had begun in August 1996, at an estimated cost of around US\$ 54 million and was funded by the French-Lebanese Financial Protocol.
- Technical assistance to the Ministry of Energy and Water: A technical assistance project of 30 million FF, funded by the financial French-Lebanese Protocol was completed. Un-



der this program assistance was provided to the Ministry of Energy and Water and to major water authorities in the form of capacity building, institutional development and supply of necessary equipment.

In parallel to the commencement of these programs at the national level, the CDR focused on the development of water treatment plants in all Lebanese regions. These projects are detailed below by governorates, as follows:

Greater Beirut area NERP:

Several contracts have been awarded regarding the rehabilitation and construction of drinking water supply systems in the Greater Beirut area, for a total cost of US\$ 45 million, financed by Kuwait Fund for Arab Economic Development – KFAED. These contracts included the following works:

- Rehabilitation of water sources, such as Qashkoush, Ain al Delbe springs and Dai-chounieh wells
 - Rehabilitation of Dai-chounieh and Hazmieh drinking water treatment plants
 - Rehabilitation and construction of drinking water supply and distribution networks in the Greater Beirut area.
- Expansion of Dbayeh drinking water treatment plant (First phase): the capacity of Dbayeh drinking water treatment plant has been increased to 430000 m³ per day. This project was financed by the Italian-Lebanese Protocol, with a total amount of US\$ 5.7 million.

In addition to these projects, and within the framework of the Beirut infrastructure rehabilitation, the water supply and distribution networks were rehabilitated and upgraded in streets targeted by this project.

Bekaa and Baalback Hermel Governorates:

- Baalback-Nabi Sheet drinking water supply and Baal-

back wastewater network: the US\$ 32 contract million was financed by the World Bank. Under this project, the rehabilitation of drinking water reservoirs, pumping stations and installation of distribution pipes were completed, digging and installation of wells in the region of the project, as well as creating a wastewater discharge network in Baalback.

- Baalbeck-Nabi Sheet domestic connections and additional distribution lines: the contract amounts to about US\$ 1.25 million, financed by the World Bank.

- Construction of wastewater and additional drinking water distribution pipes in Baalback and Amshki: these works are considered to complement the project on drinking water distribution and wastewater pipeline network construction for Baalback-Nabi Shit region mentioned above. The works resulted also in the construction of pipeline network to distribute drinking water and execute domestic connections and wastewater networks at a cost amounting to about US\$ 11.7 million financed by the World Bank.

- Construction of wastewater and additional drinking water distribution pipes in 17 villages in Baalback district: these works complement the project on drinking water distribution and wastewater pipeline network construction for Baalback-Nabi Shit region mentioned above; through it a pipeline network to distribute drinking water and execute domestic connections and wastewater networks at a cost amounting to around US\$ 12.2 million financed by the World bank.

- Yammouneh drinking water supply: the US\$ 11.9 contract is financed by the Islamic Development Bank (IDB). This project includes the construction of a dam to impound the water of the Yammouneh Spring, the

installation of 76 km long water supply pipes, 246 kms long of water distribution pipes, and the construction of 23 new water reservoirs and two artesian wells.

- Ouyoun Orghosh drinking water supply: the US\$ 7.8 million contract is financed by IDB. This project includes the installation of pipes for the supply of water from Qabua and Shemali springs, 72 kms of supply pipes, 110 kms of distribution networks and construction of 18 new water reservoirs.

- Habilitation and expansion of drinking water systems in Bekaa governorate (North-West Bekaa) Third component of Phase 1: this project includes the drilling of wells and distribution networks. The cost of the project is estimated at US\$ 13.4 million locally funded by virtue of Bekaa Development Decree number 12919, dated 27/8/1998.

- Installation of drinking water transmission lines to al-Bustan and al-Harf from spring waters of Nassara and Harik in Hermel region: the contract amounts to US\$ 2 million and was funded by the Kuwaiti Fund.

- Execution of irrigation works in Hermel region: the contract amounts to about US\$ 1 million funded by the Kuwaiti Fund for Economic and Social Development

- Al-Yammouneh infrastructure: this project includes the construction of drinking water supply and wastewater networks, in addition to a wastewater treatment plant in al-Yammouneh. The works amount to US\$ 3.96 million financed by the IDB.

- Domestic connections for the regions covered by Yammouneh-Ouyoun Orghosh drinking water systems: by virtue of this project, domestic connec-



tions are being set up for all villages that benefited from the Yammouneh-Ouyoun Orghosh projects, which were achieved as shown above; the project amounts to approximately US\$ 6.5 million through local funding, by virtue of Bekaa Development Decree number 12919 dated 27/8/1998.

- Shmistar drinking water supply: this project was estimated at approximately US\$ 4.5 million, aiming to provide drinking water to Shmistar region and its surroundings.

- Execution of water supply networks and drinking reservoirs for some regions in Bekaa governorate: amounting to US\$ 1.1 million, funded by the Arab Fund for Economic and Social Development.

- Work execution project of drinking water network in Jrebta in Baalback: amounting to US\$ 1.4 million, locally funded.

- Project to supply drinking water to villages in Baalback district (north east part) – Sections 1 and 2: this project was split into three sections to supply drinking water to the regions extending from Hadeth – Arsel to Kaa region in North Bekaa, and included constructions of reservoirs and distribution networks. The US\$ 13 million is locally funded.

- Execution of distribution lines and additional drinking networks and domestic connections in Baalbeck, Khodr, Nabi Sheet and Kherbe: amounting to US\$ 4.9 million, funded by the International Bank for Reconstruction and Development (IBRD).

- Operating and maintenance of water and sewage systems in Baalbeck, Nabi Sheet region: amounting to US\$ 9.5 million, funded by the International Bank for Reconstruction

and Development (IBRD) from 2005 to 2012.

- Execution of additional works within the domestic connection project for Yammouneh-Ouyoun Orghosh regions: amounting to US\$ 5.6 million, locally funded by virtue of Bekaa Development Decree number 12919 dated 27/8/1998.

- Rehabilitation of water supply systems in West Bekaa and villages in east Zahle (first lot): financed by World Bank, amounting to US\$ 14.2 million and includes the construction of pumping stations, purification and water reservoirs, installation networks, domestic connection distribution in many villages of West Bekaa and Zahlé districts.

Akkar Governorate

- Drinking water supply network for Kobayat Water Authority and Akkar Wastewater Network: the contract amounts to US\$ 14.8 million, financed by the European Investment Bank; it included the execution works of wells and reservoirs and pumping stations as well as drinking distribution pipes.

- Drinking water supply network for some villages in Akkar provided from wells: the contract amounts to US\$ 4 million, financed through a grant from the Kingdom of Saudi Arabia.

- Akroum and Kfartoun drinking water supply: the contract value is of US\$ 6.6 million, financed by the Saudi Fund for Development. It included a limitation of Sabeh spring and the execution of wells, reservoirs, pumping stations and drinking water pipe lines.

- Installation of drinking water supply for Beit Mallat and surrounding villages in Akkar: the project covers the installation of reservoirs, drinking water supply pipes and pumping stations. The value of the contract reached approximately US\$ 19.5 million, jointly funded by the Islamic Development Bank and OPEC International Development

Fund.

- Execution of works for Ain Yacoub drinking water supply: the contract amounts to US\$ 5.9 million funded by the Saudi Fund for Development; it included the execution of reservoirs, a pumping station and pipes.

- Installation of drinking water in Barghash-Hrar, Kaf al Tineh, Qobiit in Akkar: the US\$5.8 million contract is funded by the Saudi Fund for Development. This project includes the execution of the limitation of Kaf al Tineh spring, establishing local reservoirs and a main reservoir, pumping stations and transmission lines.

- Supply drinking water to Akkar al-Atika region: this project aims at supplying Akkar al-Atika region and its surroundings with drinking water. The works included limitation of springs, establishing local wells and a main reservoir, pumping stations and transmission lines. The US\$ 7.6 million cost is locally funded.

North Governorate

- Installation of drinking water supply networks for Tripoli Water Authority and Tripoli wastewater networks: the contract amounts to US\$ 34 million, financed by the European Investment Bank. Works were expanded to include construction of drinking water reservoirs to meet the needs of the population until the year 2025. The project is currently in operation.

- Renovation of water networks and domestic connections in Tripoli: the value of the project is 7.4 million euro and is funded by the AFD.

- Expansion of Bahsas water treatment plant: this project includes increasing the capacity of Bahsas water treatment plant from its present capacity of 40000m³ per day to 70000m³ per day. The value of the project is US\$ 4 million; it is funded by the AFD.



- Minieh drinking water supply: the project aims at supplying Minyeh and surrounding villages with drinking water. The project amounts to US\$ 1.8 million and is financed by the Saudi Fund for Development.

- Installation of two wells in Deir Aamar and Nabi Yousha in the north: amounting to US\$ 862 thousand through local funding

- Execution of water works in various regions of Zgharta: amounting to an approximate value of US\$ 1.7 million, it is financed by the Kuwaiti Fund for Arab Economic Development

- Installation of drinking water supply networks for Batroun Water Authority and some wastewater networks: the contract amounts to US\$ 20.5 million, financed by the European Investment Bank.

- Arranging Abi Yaghi well and its annexes in Batroun: amounting to US\$860 million, through local funding.

- Execution of water supply pipe lines for water purification station in Kousba, Koura district: contract amounts to US\$387 thousand, through local funding.

- Tripoli Water Authority Management contract: This contract is considered to be part of the Government's efforts to restructure the water sector and to involve the private sector in its operation. The Tripoli Water Authority Management contract awarded to a French firm reached 8.9 million euro, financed by the French Development Agency. The management contractor is operating and managing Tripoli Water Authority installations and facilities, as well as billing and collection of water fees, in addition to operating and managing the human and financial resources of Tripoli Water Authority. Furthermore, the management contractor will supervise the rehabilitation of Tripoli water supply network

including increasing the capacity of Bahsas water treatment plant from its current capacity of 40000 m3 to 70000m3 per day.

- Development contract and improving performance and enlarging utilization client management program X7 for North Lebanon Water Authority: this contract is also considered as part of the Government's efforts to reorganize and redevelop the water sector in Lebanon. The contract amounts to about 400,000 Euros, funded by the AFD.

- Secondary and subsidiary networks in Beddaoui: contract amounts to US\$3.6 million, funded through a grant by the Kuwait Fund.

- Drinking water and protection walls in Becharre district: contract amounts to approximately US\$1.7 million, funded through a grant by the Kuwaiti Fund.

- Execution of Barissa Hill Lake dam: the project aims to supply drinking water and irrigation to villages in the upper parts of Minyeh-Danniyeh district. The project is funded by the Saudi Fund for Development through a grant offered by the Kingdom of Saudia Arabia amounting to US\$ 14.25 million.

- Execution of drinking water supply pipes between Fay' and Kousba in Koura district: contract amounts to US\$ 3 million, funded by the Kuwaiti Fund.

- Works for the completion of water projects in Batroun District (known as Sad El Fajwat) estimated at US\$ 5.7 million funded by the Kuwait Fund for Arab Economic Development.

- Construction of drinking water distribution networks and wastewater collection networks in Ehden-Zgharta: the US\$ 13,6 million project is funded by the Abu Dhabi Development Fund.

- Continuation of the project aimed at supplying drinking water to the villages of Bargash-Hrar-Kaf el Tineh and Kabeit in

North Lebanon: the project consisted of water works to complement the existing networks in these villages. The US\$9,8 million project is funded by the Saudi Arabia Fund and the Saudi Arabia.

Mount Lebanon Governorate

- Drinking water transmission to Keserwan coastal region from al-Madik spring: the value of this project's contracted amounted to US\$ 76 million funded by the Japanese Bank for International Cooperation (JBIC). It included: construction of a Dam to impound the waters of Madik Spring and installation of main water pipe lines (through a tunnel) that transmit the waters to Keserwan coastal region; construction of main water reservoirs and drinking water distribution networks servicing Keserwan coastal region.

- Rehabilitation of drinking water networks and wastewater networks in Chouf and Metn regions: the contract amounts to US\$ 25 million, financed by the World Bank. The project includes the construction of 22 water reservoirs, installation of transmission pipes and drinking water distribution networks, in addition to wastewater discharge networks.

- Rehabilitation of infrastructure in displaced villages: The works for the rehabilitation of old drinking water networks and installation of new networks in the displaced villages of Baabda, Aley and Chouf districts were completed. The US\$ 7.15 million project was funded by the Saudi Fund for Development.

- Transmission of Ra'ayan spring water to Aley main water reservoir: the purpose of this project is to transmit around



12000m3 of water daily from Ra'ayan spring to Aley main water reservoir. The cost of project amounted to US\$ 15 million financed by the Kuwait Fund for Arab Economic Development.

- Execution of miscellaneous water works in Barouk region: this project amounts to US\$ 5.25 million; it is financed by the Kuwait Fund for Arab Economic Development.

- Rehabilitation of wells and execution of wastewater facilities in Ain el Delbe: this project amounts to US\$ 4.15 million; it is financed by the Kuwait Fund for Arab Economic Development.

- Execution of water transmission line from Nahr Ibrahim to Jbeil facility: this project is financed locally and amounts to about US\$ 2 million.

- Project to transmit water to Qattine-Azar: the purpose of this project is to use the water of Qattine Spring to supply drinking water to the upper areas of Metn. The cost of the project is estimated at US\$ 4.25 million and is financed by the Kuwait Fund for Arab Economic Development.

- Implementation of a water supply line that transports water from Nabee El Assal to Bhaness reservoirs – Phase 1 – The cost of the project was estimated at around US\$ 8.1 million funded by the Kuwait Fund For Arab Economic Development.

- Well rehabilitation and construction of facilities for the benefit of Ain El Delbe Water Utility – The cost of the project was estimated at around US\$ 4 million funded by the Kuwait Fund for Arab Economic Development.

South and Nabatiyeh Governorates

- Rehabilitation, expansion and equipping of Taybeh

drinking water treatment plant (phases I and II): executed works were estimated at around US\$28.40 million split into two stages: the first stage estimated at around US\$21.00 million of which US\$12 million funded by the Islamic Bank for Development and the remainder 9 million by local funding. The project aims at constructing a drinking water treatment plant. After completion of works, the plant will be capable of producing 25000m3 of drinking water per day and pumping it through drinking water systems operated by the Jabal Amel Water Utility. The second stage is estimated at around to US\$7.40 million, and aims at rehabilitating existing facilities and buildings, providing electric power, and performing operation and maintenance activities through local funding.

- Digging and installation of wells in various south regions damaged by war in 1996: amounting to around US\$ 2.5 million, funded by the Arab Fund.

- Rehabilitation and development of Sour drinking water supply networks: the value of this contract amounts to US\$ 20.5 million and is financed by the AFESD.

- Rehabilitation and development of Sour rural area drinking water supply network: the value of this contract amounts to US\$ 27 million and is financed by the AFESD.

- Execution of works from drinking water pumping stations in Sour: amounting up to about US\$ 1 million through local funding.

- Drinking water supply network for Saida Water Authority: the value of this contract amounts to US\$ 4.6 million and is financed by the AFESD.

- Rehabilitation of Jezzine drinking water supply networks and systems: this project amounts to approximately US\$ 1.25 million and funded by the

French Agency for Development.

- Execution of drinking water conveyor lines from Nabeh al-Taseh to Nabatiyeh region: this project aims at increasing the capacity of drinking water and services in this region. The project amounts to approximately US\$ 5.2 million and is funded by the French Agency AFD.

- Digging and installation of 4 wells and reservoirs and drinking water network in Nabatiyeh region: amounting to approximately US\$ 2 million, funded by the European Union.

- Execution of drinking water in al-Habbariyeh region in Hasbaya: the project amounts to approximately US\$ 11.30 million and it is financed by the French Agency.

- Execution of drinking water works of Jabal Aamel water installations in Marjeyoun and Bint Jbeil amounting to about US\$ 12.15 million, funded by the Islamic Bank for Development.

- Execution of digging and installation of water wells and drinking water in Nabatiyeh region: worth of around US\$ 1 million, funded by the European Union.

- Drilling of artesian wells in Kfarhamam in Hasbaya: worth of around US\$270 thousand, funded through a European Union grant.

- Digging and installation of wells in Douair and Klaileh: the project's costs are estimated at approximately US\$ 1.2 million financed by the Kuwait Fund.

- Repair and renovation of water systems in Nabatiyeh District: The project included the construction of water tanks, water towers and 6km long transmission lines, 40 km long distribution lines in the villages of Kfarrouman, Harouf, Arabsalim, Haboush and Ansar. The costs amounted to US\$4,9 million and were funded by the Abu Dhabi Fund.



- Digging of two drinking water wells in Bint Jbeil: The project included digging two artesian wells in Bint Jbeil to increase the drinking water supply, at around US\$ 1 million funded by the European Union.

Work progress in main ongoing projects

North and Akkar Governorates:

- Rehabilitation and expansion of water networks in Chekka and Anfe: the purpose of this project is to supply drinking water to Chekka and Anfe until Hreishé by drilling several artesian wells in Jaradeh area, rehabilitation and expansion of drinking water networks, refurbishment of domestic connections and construction of reservoirs. The costs of the project are estimated at US\$ 8.2 million and are financed by the Arab Fund for Economic and Social Development. 95% of the work has been completed.

- Water supply to remote villages connected with the reservoirs of Hrar and Kabiit in Akkar: This project includes the construction of reservoirs, installation of water transmission pipes, distribution networks, and pumping stations servicing around 25 villages. The project is estimated at US\$ 18,6 million, and is funded by the Arab Fund for Economic and Social Development. 40% of the work has been completed to date.

- Installation of drinking water networks and pumping stations wells in Koura and Batroun Districts: Edde, Dhour Edde, Basbina, Abrine, Hamat, Kfarhalda, Assia, Darbashtar, Majdel, Kaftoun, Dhour el Hawa and Ram. Costs are estimated at US\$7,7 million and funded by the French Development Agency and the CDR budget (revival plan). Around 70% of works were completed to date.

- Continuation of water

systems in Minnieh-Danniyeh: this project aims at complementing the water systems works that the CDR executed between 1998 and 2002. Parts of this project are still unexploited, awaiting their continuation. These works are estimated at US\$ 10 million the CDR funded by the Arab Fund for Economic and Social Development and the CDR budget (Revival plan). 5% of works are completed to date.

- Repair and renovation of water systems in Becharre: This project includes the supply of drinking water from Qadisha Spring to Becharre and surroundings, the expansion of water networks and domestic connections and the construction of water tanks. The cost of this project is estimated at US\$ 12,3 million, and is funded by the Arab Fund for Economic and Social Development and the CDR budget (Revival plan). 5% of works are completed to date.

Mount Lebanon Governorate

- Execution of complementary works as part of the project for the rehabilitation of wells and construction of facilities in Ain el Delb Water Utility (formerly): the project is estimated at around US\$ 4,1 million; it is financed by the Kuwait Fund for Arab Economic Development, and about 95% of the work has been completed to date.

- Construction of Qaysamani Dam in Baabda district: the project aims at supplying drinking water to Baabda and Aley. The dam has a capacity of around 1 million cubic meter and supplies around 12000 cubic meter of water daily to both districts. The cost of the project is estimated at US\$ 21 million and 9% of the work has been completed to date.

- Upgrading the drinking water systems in Byblos district: Phase I. The project is estimated at EUR 40 million (including waste water systems). The

project includes the following: Construction of 15 new tanks, repair of 5 tanks, installation of 61 km of transmission lines, installation of 39 km of distribution lines, digging of 2 new wells, construction of 2 pumping stations, and construction of 10,8 km of new roads that lead to the locations of water facilities. The project is funded by the Lebanese-Italian Financial Protocol. 15% of the work has been completed to date.

- Construction of Manzoul hill lake- in Metn district: The purpose of the Manzoul Dam aims in upper Metn, is to increase the supply of drinking water in Mtein, Aintourah, and Zaarour, with a 400,000 cubic meter storage capacity. The cost of this project is estimated at US\$ 15 million funded by the Kuwait Fund for Arab Economic Development, the CDR budget (Revival plan). Completion rate to date is 1%.

- Supply of drinking water to Greater Beirut (transmission of Awali water) Phase I/tunnel and transmission lines: the purpose of this project is to supply 250,000 m³ of water daily to Greater Beirut. The project includes the construction of a 24 km long tunnel for water refinement, two transmission lines of a diameter of 1400 mm and 9 km long to aliment 3 local tanks and distribution lines. The CDR is responsible for the execution and supervision of the works of the tunnel, transmission lines and local tanks at an estimated cost of US\$ 200 million, funded by the World Bank. The institution is responsible for the execution of local water tanks, refinement station, and distribution lines estimated at US 140 million.



South Lebanon and Nabatiyeh Governorates

- Execution of water and wastewater works in Sour and Nabatiyeh districts: the cost of the project is estimated at around US\$ 4.8 million. It is financed and supervised by the Kuwait Fund for Arab Economic Development.

- Rehabilitation and upgrading of Nabatiyeh district water systems: the cost of the project is estimated at around US\$ 4.8 million funded by Abu Dhabi Fund for Development and about 80% of the work has been completed to date.

- Execution of water works at Jabal Aamel Utility in Marjeyoun and Hasbaya districts: The project includes the following: construction of main and subsidiary transmission and distribution lines, installation of pumping stations in Bint jbeil, Marj el Khaoukh and Chebaa. The cost is estimated at around US\$ 43 million, funded by the Islamic Bank for Development, and about 75% of the work has been completed to date.

- Execution of works for the replacement of internal networks and domestic drinking water connections in Chebaa, Hbariyeh, Kfar Chouba, Ain Kaniya, Chweya, Kfar Hammam, Kfir and Khalwat Kfir – Phase 2: the costs are estimated at around US\$12,3 million, and are funded locally through a Treasury loan – Decree 6841/2011; about 90% of the work has been completed to date.

Bekaa and Baalback-Hermel Governorates

- Execution of complementary water works on the roads of Rashaya and Western Bekaa - Phase II - group I - The first group includes works to install drinking water transmission and distribution lines on

roads in the districts of Rashaya and West Bekaa in the Dahr el Ahmar, Kfarqouq - Rashaya, Rashaya - Masnaa, Jeb Jenin -Kefraya. The cost of the project is estimated at U \$ 3.7 million, locally funded by Decree 10090. 80% of the works have been completed to date.

- Execution of complementary water works on the roads of Rashaya and Western Bekaa - Phase II – Group II - The second group includes works to install drinking water transmission and distribution lines on roads in the districts of Rashaya and West Bekaa in Kherbet Rouha, Ain Arab, Bakka, Deir el Achayer, Rashaya- Ain Ata, Jeb Janin- Kmed el Laouz - Falouj . The cost of the project is estimated at US \$ 2,9 million, locally funded by Decree 10090. 80% of the works have been completed to date.

- Continuation of renovations of water systems in the villages of East Zahle district (Phase II – Part II – Groups, 1,2 and 3): The purpose of the works is to construct local tanks and install drinking water distribution networks in: A'iha, Ain Harsha, Bakka, Deir el Achayer, Koukaba, Majdel Balhis, rashaya, Tannoura, Massa, Riit, Kousaya, Kfarzabad, Faour, Majdel Anjar, Souairi, Manara and Ain Kfarzabad. The cost of the project is estimated at U \$ 24,35 million, locally funded by Decrees 10090 and 10633. 5% of the works have been completed to date.

Main contracts awarded during 2014

- Annex to the contract pertaining to the continuation of works to supply Kaf el Tineh-Akkar with drinking water, estimated at around US\$ 1 million, and funded by the Saudi Fund and the Lebanese Government.

- Annex to the contract pertaining to the of drinking water to Jord Akkar, estimated at

US\$ 3,6 million, and funded by the Arab Fund and the Lebanese Government.

- Repair and renovation of water systems in Becharre: The cost of this project is estimated at US\$ 12,3 million, and is by the Arab Fund for Economic and Social Development and the Lebanese Government.

- Continuation of water systems in Minnieh: The costs of works are estimated at around US\$ 10 million and are funded by the Arab Fund for Economic and Social Development and the Lebanese Government.

- Annex to the contract pertaining to the execution of drinking water works in Chekkah and Anfeh on Koura and Batroun coastline, estimated at around US\$ 900,000, and funded by the Arab Fund and the Lebanese Government.

- Annex to the contract pertaining to the installation of a number of water systems in several villages and towns in Batroun and Koura Districts, estimated at around US\$, and funded by the French Development Agency and the Lebanese Government.

- Construction of Manzoul hill lake in Metn District: estimated at US\$ 15 million, funded by the Kuwait Fund for Arab Economic Development and the Lebanese Government.

- Execution of remaining works within Phase II of the project on the renovation of drinking water systems in West Bekaa, Rashaya and a number of village in east Zahle, related to group I, estimated at US\$ 5,9 million and locally funded.

- Execution of remaining works within Phase II of the project on the renovation of drinking water systems in West Bekaa, Rashaya and a number of village in east Zahle, related to group III, estimated at US\$ 7 million and locally funded.

- Execution of remaining works within Phase II of the project on the renovation of drinking



water systems in West Bekaa, Rashaya and a number of village in east Zahle, related to group II, estimated at US\$ 11,5 million and locally funded.

- Supply of drinking water to Greater Beirut (transmission of Awali water) Phase I/tunnel and transmission lines: estimated at US\$ 200 million and funded by the World Bank.

- Annex to the contract pertaining to drinking water and irrigation water in Hbarieh-Hasbaya, estimated at around US\$ 2 million, and funded by the French Development Agency and the Lebanese Government.

- Annex to the contract pertaining to execution of works for the distribution of drinking water to the villages of Hasbaya, Hbarieh, Kfarchouba, Ain Qania, and Chouaya in the Arkoub region estimated at around US\$ 2,2 million, and funded locally.

- Annex to the contract pertaining to execution of Jabal Amel works (Bint Jbeil, Marj el Khaoukh and Chebaa) in the South of Lebanon, estimated at around US\$ 2,6 million, and funded by the Islamic Development Bank and the Lebanese Government.

Main projects under preparation (2015-2017)

Greater Beirut

- Expansion of Dbayeh drinking water facility: This project aims at increasing water production in Dbayeh facility. The costs are estimated at US\$5.1 million, and are expected to be financed by the Italian Protocol. The action plan of the project is being currently re-considered with Beirut and Mount Lebanon Water Authority and works are expected to commence by the end of 2015.

- Increasing drinking water supply to Greater Beirut (Bisri Dam)- Phase II: the purpose of this project is to supply 500,000 m³ of water daily to Greater Beirut. The project includes the construction of a Dam in

Bisri River, the construction of an electricity production plant, the installations of wastewater systems and land acquisitions, estimated at US\$617 million. The funding is expected to be granted by the Islamic Development Bank and the World Bank. Works are scheduled for second half of 2016.

Bekaa and Baalback-Hermel Governorates

- Rehabilitation of water systems in West Bekaa and villages in east Zahle: the project is funded by a US\$ 32,9 million grant from the State of Kuwait. This project is complementary to the former works carried out by the Kuwait Fund (installation of drinking water distribution networks in Ain Zebdeh, Tel Dnoub, Kefraya, Mansoura, Dakoueh, Salmiya, Tel el Zaazee and Sultan Yacoub al-Tahta in addition to drilling of five wells out of seven in Shamseen area). The project includes the drilling of two wells and installation of the seven wells; building pumping stations in Shamseen, and installation of pumping lines from these two stations to a central tank on Mount Anjar and another on Mount treble; construction of the two mentioned tanks in addition to a tank in Majdel Anjar and another in Sultan Yacoub al-Tahta and two local tanks in Jeb Jenin and Kamed el Laouz; installation of transmission line from these central tanks to local tanks in West Bekaa and villages east of Zahle; construction of transmission lines from the central tank in Baaloul to Jeb Jenin and Kamed el Laouz tanks and the internal distribution network in both towns. Works are scheduled for mid-2015.

- Rehabilitation and improvement of drinking water systems in Zahle and surroundings: The project consists of three parts: Part I includes US\$ 5 million drinking water networks in Haoush el Omara and Ksara, funded, implemented and man-

aged by USAID. Part II includes the drinking water network in the city of Zahle, which feeds the drinking water purification plant in, the cost of this part is estimated at US\$ 5 million, and is implemented and managed by the Ministry of Energy and Water. Part III includes drinking water systems in east Zahle, Dhour Zahle, Touaite, Mouaalak, Karak, Madina Sinaiya, Qaa El Reem and Hezerta. Part III are estimated at US\$ 29,7 and are funded by the Kuwait Fund for Arab Economic Development, the budget of the Ministry of Energy and Water and the Lebanese Government. Works are scheduled for mid-2016.

- Installation of a transmission line from Mount Arab tank to some villages in the District: This project includes the installation of drinking water pipelines. The cost of this project is estimated at US\$ 6.5 million and is funded by a treasury loan No. 99 Date 05.22.2014. Works are scheduled for the summer of 2016.

- Execution of miscellaneous water works in Bkifa - Beit Lahia - Aiha - Haoush: This project includes the installation of drinking water transmission pipes. The cost of this project is estimated at US \$ 2.5 million and is funded by treasury loan No. 99 of 05/22/2014. Works are scheduled for the summer of 2016.

- Supply of drinking water to Hermel District: This project includes the installation of drinking water transmission pipes, construction of water tanks, installation of distribution networks and installation of pumping stations. The cost of this project is estimated at around US \$ 20 million financed by treasury loan No. 99 of 05/22/2014. Works are scheduled for the summer of 2016.



North and Akkar Governorates

- Project to supply drinking water to Akkar Plain: the project includes the construction of reservoirs, installation of drinking water transmission pipes, and installation of distribution networks and pumping facilities servicing all the villages of the Akkar Plain. The costs are estimated at US\$ 48 million, funded by the Islamic Bank for Development. Works are expected to commence in the second quarter of 2016.

- Continuation of drinking water projects in Akkar: works are estimated at around US\$ 20 million. The funds are approved within the framework of the Reconstruction and Development Plan of the Lebanese Republic – Paris III, awaiting the signature of the funding agreement with the Saudi Fund for Development. Works are expected to commence by the end of 2016.

- Continuation of water network projects in Qalamoun, Koura and Fouar within North Water Authority: the costs are estimated at around US\$ 4,4 million funded by an Italian Government grant. Works are expected to commence in the second half of 2015.

- Execution of the water project in Qalamoun and Ras Masqa situated near Chekka and Anfeh and continuation of Koura projects. The costs of the works are estimated at US\$ 15,4 million, funded by the Arab Fund for Economic and Social Development. Works are expected to commence in the second half of 2015.

- Renovation of water systems in Minyeh-Danniyeh: this project aims at complementing the water systems works that the CDR had executed between 1998 and 2002. 7 parts of this project are still unexploited,

awaiting their continuation. After the Italian Government expressed willingness to finance these works estimated at US\$ 7,5 million the CDR started the preparation of related studies. Works are expected to commence in the first half of 2015.

- Construction of a dam and lake in Wadi el Chech Valley- in the region of Cedars-Becharre: this project aims at constructing a dam and a lake in Wadi el Chech Valley, in the neighborhood of the Cedars region, in addition to a drinking water sanitation station, a pumping station, two water reservoirs and 4 km transmission lines. The capacity of the lake is estimated at 1 million cubic meter that will supply drinking water to the area of Jebet Becharre which includes: Becharre, Mar laichaa, Hadchit, Bekaa Kafra, Bkarkasha, Bazoun and Hassroun. The cost of the project is estimated at US\$ 20 million, and is expected to be funded by the Kuwait Fund. Works are scheduled for the first half of 2016.

Mount Lebanon Governorate

- Project for the impoundment of the Barouk spring in Chouf District: this project aims at increasing the drinking water supply in Chouf and Aley regions. The cost of the project is estimated at US\$ 1 million and is funded by the Arab Fund for Economic and Social Development. Works are expected to commence in 2015.

- Project for the renovation and repair of the potential soil slide in Kfarnabrakh (Mir Bachir Canal): the cost of the project is estimated at US\$ 4,5 million funded by a treasury loan No.99 of 22/05/2014. Works are scheduled for first half of 2015. South Lebanon and Nabatiyeh Governorates

- Execution of miscellaneous water works in the liberated regions in the South of Lebanon: The cost of this proj-

ect is estimated at around US\$ 6 million and will be funded by the Arab Fund for Economic and Social Development. Works are expected to commence in the second half of 2015.

- Execution of water works that complement the drinking water project targeting Jabal Aamel Water Utility (Stages 1 and 2): Costs are estimated at around US\$ 28 million, and are funded by a treasury loan; Works are expected to start during the first half of 2014.

- Execution of additional works that complement the drinking water project targeting Jabal Aamel Water Utility (Phase 3): Costs are estimated at around US\$ 56 million, and are funded by the CDR (Revival Plan); works are expected to commence in the first half of 2017.

- Rehabilitation of main pumping facilities in Sidon: Costs are estimated at around US\$ 2.8 million, and the funding is proposed on the German Agency; works are expected to commence in the second half of 2016.

- Rehabilitation of drinking water sources and drinking water networks in Sidon: Costs are estimated at US\$ 14 million, and the funding is proposed on the German Agency. Works are expected to commence in the second half of 2016.

- Execution of additional water works in Jabal Amel – Bint Jbeil District – the project includes the construction of main and secondary water networks in the villages of Bint Jbeil District at an estimated cost of US\$21,5 million funded by a treasury loan No.99 of 22/05/2014. Works are scheduled for the second half of 2015.

- Execution of additional water works in Kfarrouman in Nabatiyeh – at a cost of US\$ 2,5 million, funded by the Abu Dhabi Fund. Works are scheduled for mid-2016



Main contracts signed during 2014

Project name	Contract amount (\$US	Funded by	Execution starting date	Expected achievement date
Annex of the contract pertaining to the continuation of the project aimed at supplying drinking water to the region of kaf el Tineh in Akkar	1,025,839	Saudi Fund and the Lebanese Government	Oct-14	Marhc 2015
Annex of the contract pertaining to the project aimed at supplying drinking water to the region of Jerd Akkar	3,554,315	Arab Fund for Economic and Social Development Lebanese Government	Sep-14	Mar-15
Renovation of water networks in Becharre	12,295,009	Arab Fund for Economic and Social Development CDR (Budget (revival plan	Dec-14	Dec-16
Project to complement water networks in Miniyeh	10,099,487	Saudi Fund CDR Budget (revival plan	August-2014	July-2016
Annex of the contract pertaining to the project aimed at supplying drinking water to Chekka, Anfeh, Koura coast and Batroun	896,406	Arab Fund for Economic and Social Development Lebanese Government	May-14	Oct-14
Annex of the contract pertaining to the project aimed at supplying drinking water to several villages and towns in Batroun and Koura	1,067,775	French Development Agency	Jul-14	Jul-15
Construction of Manzoul hill lake in Metn	14,884,966	Kuwait Fund for Arab Economic Development Lebanese Government CDR buget (revival plan	Nov-14	Oct-16
Completion of unfinished works as part of Phase 2 of the project on the renovation of drinking water networks in West Bekaa, Rachaya and a number of villages of East Zahle, pertaining to group 1	5,874,420	Lebanese Government	Oct-14	Sep-16
Completion of unfinished works as part of Phase 2 of the project on the renovation of drinking water networks in West Bekaa, Rachaya and a number of villages of East Zahle, pertaining to group 3	6,924,420	Lebanese Government	Oct-14	Sep-16

Project name	Contract amount (\$US)	Funded by	Execution starting date	Expected achievement date
Completion of unfinished works as part of Phase 2 of the project on the renovation of drinking water networks in West Bekaa, Rachaya and a number of villages of East Zahle, pertaining to group 2	11,509,215	Lebanese Government	Oct-14	Sep-16
Project to Supply Greater Beirut with drinking water (water transmission from al-Awali) – Stage 1 / Tunnel and transmission lines	200,000,000	World Bank	Dec-14	Oct-18
Annex of the contract pertaining to the drinking and irrigation water project in Hbarieh - Hasbaya	EUR 1,313,370	French Development Agency	Jun-14	Mar-15
Annex of the contract pertaining to the project aimed at executing works for the distribution of drinking water to the villages and towns of Hasbaya, Hbarieh, Kfarchouba, Ain Qania, Chwaya in Arqoub region	2,168,927	CDR budget (revival plan)	Mar-14	Jan-15
Annex of the contract pertaining to execution of water works in Jabal Amel (Bint Jbeil, Marj el Kaoukh, and Chebaa) in the South of Lebanon	2,56,507	Islamic Development Bank CDR Budget (Revival Plan)	Mar-14	Oct-15

Main projects under preparation (2015-2017)

Project name	Contract amount (\$US)	Funded by	Execution starting date	Expected achievement date
Project to increase drinking water supply to Greater Beirut (Construction of Bisri Dam) – Phase 2 / Bisri Dam	617,000,000	World Bank (promised)/Islamic Bank (promised)/Lebanese Government	Jun-16	Jun-21
Continuation of water systems in Hbarieh-Hasbaya	8,000,000	Budget loan – Decision No.99 of 22/05/2014	Sep-15	Feb-17
Project for the renovation of drinking water systems in Zahle and neighborhood	29,700,000	Kuwait Fund for Arab Economic Development	Jun-16	Nov-18
Water networks project in Akkar plain	48,173,000	Islamic Bank for Development	Jun-16	Dec-19

Project name	Contract amount (\$US)	Funded by	Execution starting date	Expected achievement date
Continuation of drinking water projects in Akkar	20,000,000	Saudi Fund for Development	Dec-16	Dec-18
Renovation of water systems in Minyeh - Danniyeh	7,500,000	Grant from the Italian Government	Jun-15	Jun-17
Continuation of water networks in Qalamoun, Koura and Fouar regions within North Lebanon Water Institution	4,400,000	Grant from the Italian Government	Jul-15	Jun-17
Barouk Spring Water Impoundment	1,000,000	Arab Fund for Economic and Social Development	Dec-15	Dec-16
Execution of new works as part of the drinking water project targeting Jabal Aamal Water Utility ((Stage 3	56,000,000	CDR's Budget (Revival Plan Proposed to Islamic Bank	Jan-15	Jan-20
Renovation of main pumping stations in Sidon	2,800,000	German Agency (proposed)	Aug-16	Aug-17
Renovation of water sources and drinking water networks in Sidon	14,000,000	German Agency (proposed)	Aug-17	Dec-18
Execution of additional water works in Jabal Amel – Bint Jbeil District	21,500,000	Treasury loan No.99 of 22/05/2014	Jul-15	Dec-18
Project on the renovation and repair of the potential soil slide i Treasury loan No.99 of 22/05/2014n Kfarnabrakh (Mir Bachir (Canal	4,500,000	Treasury loan No.99 of 22/05/2014	May-15	May-16
Expansion of water station in Dbayeh	5,100,000	CDR budget (revival plan	Dec-15	Dec-16
Constuction of a dam and lake in Wadi el Chech Valley – in the Cedars region - Becharre	20,000,000	Kuwait Fund	Jun-16	Jun-18
Installation of water pipeline from Jabal Ali reservoir to villages in the District	6,500,000	Treasury loan No.99 of 22/05/2014	Jun-16	May-17
Execution of miscellaneous water works in Bkifa – Beit Lahia- A'iha- Haoush	2,500,000	Treasury loan No.99 of 22/05/2014	Jun-16	May-17
Execution of miscellaneous water works in liberated villages in the South of Lebanon	5,880,000	Arab Fund for Economic and Social Development CDR budget (Revival Plan	Oct-15	Oct-16
Water supply to Hermel District	20,000,000	Treasury loan No.99 of 22/05/2014	Sep-16	Sep-17

Project name	Contract amount (\$US)	Funded by	Execution starting date	Expected achievement date
Execution of additional water works in Kfarrouman – in Nabatiyeh	2,450,000	Abu Dhabi Fund	May-16	May-17
Water works in Qalamoun and Ras Masqa on the outskirts of Chekka and Anfeh and continuation of projects in Koura	15.400,000	Arab Fund for Economic and Social Development	Jul-15	Jun-17
Renovation of water systems in West Bekaa and villages in East Zahle	32,900,000	Grant from the Government of Kuwait	Jun-15	Sep-18



Litani Project 800 Level



Litani Project 800 Level



Tyre Water Infrastructure



Tyre Water Infrastructure



Tyre Water Infrastructure



Tyre Water Infrastructure



Tyre Water Infrastructure

Water supply Projects Under Preparation

1. Water supply Project to be started in 2008
2. Completion of supplying the village in 2008-2009
3. Water Network Phase 1 in 2009
4. Rehabilitation of Water Network in 2009 - 2010
5. Rehabilitation of Water Network in 2010
6. Water supply Project to be started in 2010
7. Completion of supplying the village in 2010
8. Water Network Phase 1 in 2010
9. Rehabilitation of Water Network in 2010
10. Rehabilitation of Water Network in 2010
11. Completion of supplying the village in 2010
12. Water Network Phase 1 in 2010
13. Rehabilitation of Water Network in 2010
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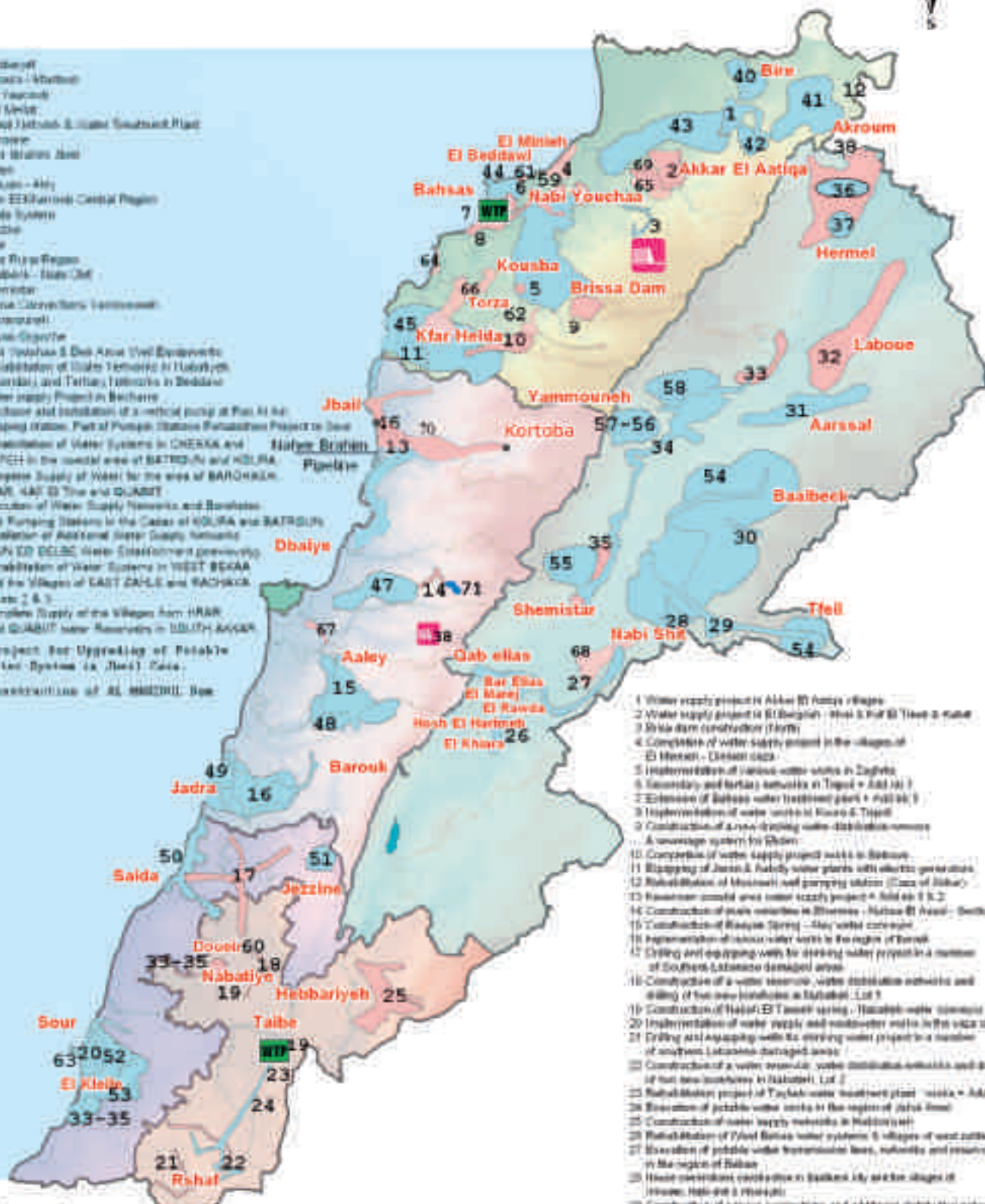
Legend

-  Dam
-  Reservoir
-  Water Treatment Plant
-  Boundary of Water Project

Water Supply Completed & Ongoing Projects



- 40 Gubbayit
- 41 Akroum - Matruh
- 42 Akroum
- 43 Akroum
- 44 Tigris - Akroum & Akroum Southwest
- 45 Akroum
- 46 Akroum - Akroum
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Legend

- Dam, Completed
- Water Treatment Plant, Completed
- Boundary of Water Project, Completed
- Boundary of Water Project, Ongoing

- 1 Water supply project in Akkar El Akkari villages
- 2 Water supply project in El Barga - Akkar El Akkari
- 3 Akkar dam construction (Phase 1)
- 4 Completion of water supply project in the villages of El Akkar - Akkar
- 5 Implementation of various water works in Zagazig
- 6 Secondary and tertiary networks in Zagazig - Akkar
- 7 Extension of Akkar water treatment plant - Akkar
- 8 Implementation of water works in Zagazig - Akkar
- 9 Construction of a new drinking water distribution network - Akkar
- 10 Completion of water supply project works in Zagazig
- 11 Mapping of Akkar & Akkar water plants with electric generation
- 12 Rehabilitation of Akkar water supply station (Case of Akkar)
- 13 Akkar water supply project - Akkar
- 14 Construction of water treatment in Akkar - Akkar
- 15 Construction of Akkar water supply - Akkar
- 16 Implementation of various water works in the region of Akkar
- 17 Drilling and equipping wells for drinking water project in a number of villages in Akkar
- 18 Construction of a water treatment, water distribution network and filling of two new boreholes in Akkar - Akkar
- 19 Construction of Akkar water supply - Akkar
- 20 Implementation of water supply and wastewater in the region of Akkar
- 21 Drilling and equipping wells for drinking water project in a number of villages in Akkar
- 22 Construction of a water treatment, water distribution network and filling of two new boreholes in Akkar - Akkar
- 23 Rehabilitation project of Akkar water treatment plant - Akkar
- 24 Extension of Akkar water supply in the region of Akkar
- 25 Construction of water supply networks in Akkar
- 26 Rehabilitation of Akkar water supply - Akkar
- 27 Extension of Akkar water treatment, water supply and wastewater in the region of Akkar
- 28 Akkar water supply project in Akkar - Akkar
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WASTE WATER

Overview of the sector

Until early nineties, wastewater facilities were composed of limited networks disproportionally distributed among the Lebanese regions. While main cities are equipped with incomplete wastewater networks and lack treatment plants, small communities lack both waste water networks and treatment plants. As a result, the issue of water pollution was exacerbating day after day (random sea estuaries polluting the sea and the beaches, random sanitation facilities, ground effluents, and streams polluting underground water layers...) therefore threatening the sanitary environment in Lebanon.

The insufficiency of wastewater services in the regions is due to many reasons, most importantly:

- 1) The insufficient spending in the sector, in other terms the lack of investments required to improve, construct and develop facilities up to an appropriate service and environmental level.
- 2) The absence of a convenient management and executive structure that could respond to the increasing urgent need for wastewater services and adopt new management methods and modern wastewater disposal techniques.

To put up with such a difficult reality, the CDR embarked since 1992 on the following waste water development strategy:

- 1) Execution of urgent repairs and renovations of the existing wastewater networks and pumping stations, and tackling the new challenges faced.
- 2) Continuing the comple-

tion of unfinished projects that were interrupted involuntarily, and expanding and rehabilitating networks according to needs.

- 3) Launching two programs aimed at protecting the Lebanese coasts and water resources from pollution.

The purpose of this strategy was to find a comprehensive solution that would solve the problem of pollution and wastewater disposal across all Lebanese regions. Meanwhile the Lebanese government has worked toward the integration and organization of the public wastewater services.

At the institutional level, the promulgation of law 221/2000 constituted a primordial step towards the restructuring and modernization of the sectors of water and wastewater; public water properties were delimited (ground and underground) and water management (potable, irrigation, and wastewater) was completely vested in four public independent investment institutions (except irrigation in South Lebanon and West Bekaa which remained under the management and exploitation of the Litani River National Authority). Moreover, all water utilities became affiliated with these institutions, under the tutelage of the Ministry of Energy and Water.

In 2001, boards of administration for water institutions were formed. In 2005, organizational decrees and new structures thereof were elaborated and enforced in order to achieve many goals, mainly rehabilitating and improving the level of services rendered by water utilities and extending their coverage, and maintaining the administrative stability and financial balance of institutions.

Achievements between 1992 and 2014

The aggregate value of projects implemented to date in the wastewater sector totaled US\$ 540* million; the main projects are the following:

- Emergency rehabilitation of wastewater networks (within the framework of National Emergency Reconstruction Program NERP1-first year): This project consisted of the emergency repair and rehabilitation of wastewater networks in all Lebanese regions, in addition to the rehabilitation of two wastewater pumping stations in Al Mina-Tripoli and Jounieh, and the construction of about 1000 kilometers of sewage networks.
- Completion of Al Ghadir wastewater pre-treatment plant: The construction and equipping of the wastewater pre-treatment plant were completed and the relevant sea outfall rehabilitated at a cost of US\$ 10 million. Such plant will serve the southern part of districts of Baabda and Aley, the west-southern part of Greater Beirut and the northern parts of the Shouf district. The plant was put into service in November 1997.
- Beirut master wastewater coastal collector project: The purpose of this project is to protect the coast extending from the Metn district to the Shouf district and eliminate all sea outfalls located along this coastal area by collecting and conveying wastewater to the Dora and Ghadir pre-treatment plants. The conveyor line comprises two sections: the northern section and the southern section.

The northern section includes the 17 km coastline extending from Dbayeh to Dora and from Ras Beirut to Dora covering, in



addition to five pumping and lifting stations. All works were wrapped up in 2000 (with a cost of US\$ 48 million). This section was designed to serve 1.5 million residents in the area of Beirut River basin by 2015.

The southern section includes Carlton-Al Ghadir collector line, which is underway at an estimated cost of US\$ 14 million, designed to serve the south west part of Beirut and part of its southern suburb, and part of Baabda district and the Damour-Al Ghadir line, executed and amounting to about US\$ 9.5 million, through funding by the Islamic Bank, which is designed to serve a major part of Aley district and part of Shouf district (more than 100,000 inhabitants). It includes 30 km long collection pipes and three pumping stations.

- Execution of the first phase of rehabilitation of Beirut infrastructure, including the wastewater network (sections 1 and 2) at a cost of about US\$ 25 million. The project aims mainly at constructing a new rainwater drainage network separated from the wastewater network.

- Execution of the second phase of rehabilitation of Beirut infrastructure, including the wastewater network of Beirut city, through funding granted by the Islamic Bank for Development, estimated at US\$ 38.5 million; and the execution of first component of phase III in Ashrafieh and Rmeil, estimated at US\$ 10 million, funded by the Arab Fund for Economic and Social Development.

- Completion of the pre-treatment plant in Saida and its sea affluent estimated at US\$ 21 million funded by the Japan Bank for International Cooperation (JIBC) and execution of the first phase of the rehabilitation

of wastewater networks in Saida and its suburbs by rehabilitating the existing network and constructing a new network for wastewater transmission to the new treatment plant, as well as phase 2 of wastewater collection networks in the coastal area of Sidon, estimated at US\$22 million, funded by Japan Bank for International Cooperation (JIBC) as a preparatory step to connecting these networks with the lines stretching until the completed treatment plant.

- Completion of construction Tripoli wastewater treatment plant, a EUR 92 million project. Also the affiliated sea outfall was completed at EUR 6 million. Both project were funded by the European Investment Bank (EIB). The projects cover Tripoli coastal area, Al Qalamun, some sections of Koura and Zgharta districts, in addition to the coastal areas of Baddaoui, Deir Aamar and Minnieh.

- Completion of the main wastewater collection line in the northern coastal cities of Tripoli (Bared-Baddaoui sections), the project includes the main collection line, the lifting stations, and the main, secondary and subsidiary sewer lines connected with the main collection lines, servicing more than 100,000 people. The EUR 12 million project was funded by a German Government grant. The donor implemented and managed the project in collaboration with the CDR.

- Completion of the works stipulated in the Lebanese-French Protocol Agreement for waste water treatment plants estimated at EUR 56 million; the works include the construction of waste water treatment plants and sea outfalls (for the coastal plants) in the following regions: Shouf coastal area (Ras enNabi Younes), Nabatiyeh area (Sharqiyeh), Chekka area, Batroun

(ongoing implementation of the sea outfall) and Jbeil. The first plant is designed to serve a big number of villages and cities of the coastal area of Iqlim el Khroub; the 2nd serves the town of Nabatiyeh and neighboring villages, the third and fourth plants serve the coastal towns and villages of Batroun district, whereas the fifth serves the coastal area in Jbeil district.

- Completion of wastewater networks installation works in the villages of the Union of Soueijani Municipalities in Chouf, at a cost of around US\$ 5,75 million, funded locally.

- Construction of a wastewater treatment plant in Baalback (la'at) at a cost of around US\$ 6.35 million funded by the IBRD to serve the city of Baalback and several neighboring villages.

- Completion of the project aimed at installing sewer lines and additional drinking water distribution lines in Khodor, Khraibeh, Nabi Shit and Baalback, at a cost of around US\$ 5,3 million through a World bank funding.

- Implementation of a pilot project for wastewater treatment in Bcharre in North-Lebanon, through the adoption of bamboo filtering technique, at a cost of around US\$ 700.000, funded by the French Development Agency.

- Maintenance and upgrading of wastewater and storm water networks in main cities: The works started in 1997 upon a Council of Ministers mandate. The works included periodical maintenance, repair of wastewater and rainwater lines in main cities, in addition to limiting the overflows and preventing



breakdowns in the existing networks. The works also included the cleaning of wastewater and rainwater lines, the installation of pipes and other necessary supplies to improve the efficiency of these networks. The project covered Greater Beirut with its southern and northern suburbs, Tripoli, Zahle, Jounieh, Saida, Sour, Nabatieh and their suburbs. This project was implemented in coordination with the Ministry of Interior and Municipalities.

Progress of ongoing projects:

1. Protection of the coast against pollution: Lebanon signed several conventions to protect the Mediterranean waters against pollution, the most important being the Barcelona Convention. The agreements stressed on the necessity of treating wastewater before it is discharged to the sea in cities and towns with populations exceeding 100,000 individual. Accordingly, several projects have been prepared for the construction of wastewater collection networks and treatment plants in the coastal areas of Lebanon. To date, the site works at the treatment plants and affiliated collection networks were completed. The following projects are underway:

- Beirut coastal area-southern section of the main wastewater collector, Carlton-Al Ghadir section: This project covers the construction of two wastewater pumping stations and the installation of 9 kilometers of wastewater sewer lines serving 750,000 people, estimated at US\$ 15 million. The Islamic Development Bank (IDB) financed the Carlton-Al Ghadir collector. Installation of the

collector lines is complete and works on connecting electricity to the pumping and lifting stations are progressing in order to put them into service.

Installation of main wastewater lines and sewer networks in the mountainous villages of Aley and Baabda located within the water basin of the Ghadir waste water treatment plant, of a value of around US\$ 16 million, funded by the Government of Germany. 55% of the work has been completed to date.

- Waste water collection and treatment in the northern coastal area of Greater Beirut, servicing 1,3 million people: works have been recently launched to install main wastewater lines and sewer lines in a number of coastal areas in the Metn district located within the Beirut River Water Basin (Dora), at an estimated cost of US\$ 22 million, funded by the European Investment Bank. 10% of the work has been completed to date.

- Installation of wastewater networks estimated at US\$ 15.4 million and a wastewater treatment plant for the coastal area of Sour and the affiliated sea outfall estimated at EUR 50,6 million, funded by the European Investment Bank. The treatment plant is intended to serve around 300,000 persons. 80% of the work has been completed to date.

- Installation of wastewater networks and pumping stations in villages and towns in Chekka region, totaling around US\$ 19 million, funded by the French Development Agency and the Lebanese Government, 90% of the work has been completed to date.

- Installation of wastewater networks and pumping stations in villages and towns in Batroun region, amounting to around

US\$ 17.50 million, funded by the French Development Agency and the Lebanese Government. 90% of the work has been completed to date.

- Installation of wastewater networks and pumping stations for villages and towns in Koura region – Phase I, amounting to around US\$ 13 million, funded the French Development Agency and the Lebanese Government. 90% of the work has been completed to date.

In addition, the CDR recently launched a EUR 38 million project funded by the Government of Italy for the installation of drinking water and wastewater networks in Jbeil coastal area. An amount of EUR 19 million is allocated to wastewater. 10% of the work has been completed to date.

- Southern coastal section of the project on wastewater line collector of Tripoli coastal region, serving regions and parts of Koura, Qalamoun, Bohsas and Tripoli, through the European Bank for Investment, of a total value of US\$ 13.35 million,. 90% of the work has been completed to date.

- Installation of wastewater networks and pumping stations in the coastal villages and towns of the Chouf district, connected with the wastewater treatment plant located in Ras Anabi Youness, estimated at US\$ 15 million, funded by the Arab Fund for Economic and Social Development and the Lebanese Government. 75% of the work has been completed to date.

II. Protection of water sources against pollution: A study was conducted in 1994 to update the Wastewater Master Plan elaborated in 1982. This study defined water basins and



priority areas for the construction of new wastewater treatment plants to protect water resources against pollution. Based on this study, the Ministry of Energy and Water developed in 2010-2011 a Waste Water Strategy that was subsequently adopted by the government.

2. Since the nineties, and in order to protect these basis, funds have been raised to construct collector lines and treatment plants in main inland cities (Zahleh, Baalbeck, Nabatieh, and others); and also in villages/towns close to water sources and springs (Laboueh, Qaraoun Lake, Anjar, Hermel, Mechmech, Becharre, Bakhoun, Chebaa, Jbaa, Hasbaya, Chakra, Hrajel and Kartaba).

The Construction of the Baalback wastewater treatment plant, funded by the World Bank, was completed in the summer of the year 2000; Also the site works related to wastewater collection and refinement in Jebb Jannine and Saghbine regions and neighboring villages were completed, with a US\$ 39 million financial assistance granted by the Islamic Development Bank.

The CDR implemented recently a pilot project in Becharre to install a waste water treatment plant, adopting the "Filtre a Roseaux" technique, estimated at US\$ 625,000 funded by the French Government

On the other hand, site works are still underway to construct and install a wastewater treatment plant in Zahle and the affiliated lines. The project cost is estimated at around US\$ 29 million, funded by the Italian Protocol (about 85% of the work has been completed); Also site works are still underway to construct two wastewater treatment plants and install wastewater networks and pumping stations

in Barouk, Freidis, AinZhalta, Nabaa el Safa, Al Aazouniye and Ain Dara, at an estimated cost of US\$ 20 million, funded by the Arab Fund for Economic and Social Development (55% completion); Site works are also underway to install wastewater networks in the villages of the Union of Municipalities of Chouf-Souaijani, at an estimated cost of US\$ 9 million locally funded. 75% of the work has completed to date; Continuation of sites works for the rehabilitation, maintenance and operation of three waste water stations in the Souaijani area in Chouf (Jdeidet el Chouf, Ainbal and Ghrifa). The US\$ 2 million project is locally funded and is scheduled for one year (80% of the work has been completed).

In the South of Lebanon, site works continue for the construction of three treatment stations and affiliated wastewater networks in Yohmor, Kfar Sir and Zoutor, at an estimated value of around US\$ 14,7 million, funded by the European Commission. 80% of the work has been completed.

Main contracts signed during 2014

- Installation of main wastewater lines and sewer networks in a number of the coastal the Metn district located with the Beirut River Water Basin (Dora), estimated at US\$ 22, and funded by the European Investment Bank.

- Study and execution of the sea outfall of the wastewater treatment plant that is currently under construction in the coastal area of Tyre, at an estimated value of US\$ 16 million, and funded by the European Investment Bank.

- Annex to the contract pertaining to the construction and installation of wastewater

networks and pumping stations in the coastal villages and towns of Chouf connected with the wastewater treatment plant located in Ras Anabi Youness, at an estimated cost of US\$ 2,25 million, funded by the Arab Fund for Economic and Social Development and the Lebanese Government.

- Annex to the contract pertaining to the construction and installation of wastewater networks and pumping stations in the coastal and central villages and towns of Koura – Phase I, at an estimated cost of US\$ 5 million, funded by the French Development Agency and the Lebanese Government.

- Execution of domestic connections connected with waste water networks and pumping stations in the coastal villages and towns of Koura – Phase I, at an estimated cost of US\$ 3 million locally funded.

- Annex to the contract pertaining to the construction and installation of wastewater networks in the Union of Municipalities of Chouf-Souei jani, with a US\$ 3 million local funding.

- Annex to the contract pertaining to the construction of three treatment stations and affiliated wastewater networks in Yohmor, Kfar Sir and Zoutor, at an estimated value of around US\$ 2,4 million, funded by the European Commission and the Lebanese Government.

Main Projects under Preparation (2015-2017)

1- Protection of the coast-



line against pollution:

The Ministry of Energy and Water conducted a comprehensive study for the district of Akkar. Based on the findings of this study, a Master Plan for wastewater collection and treatment in Akkar was elaborated, including the construction of waste water networks and a treatment plant on the Abdeh coast. To implement this Master Plan, the CDR obtained a loan from the Arab Fund, and preparations are underway to release calls for tenders.

The CDR obtained also a EUR 70 million financial assistance from the European Investment Bank to construct two wastewater treatment stations on the Keserouan coast, and another EUR 70 million fund from the French Development Agency to install the affiliated networks. The CDR is preparing for the release of a call for tenders to update the studies and develop the tender documents pertaining to this project.

The CDR is also preparing to launch the project for wastewater treatment in Qarantina and Dora (northern Beirut) and their affiliated networks after obtaining a EUR 60 million financial assistance from the European Investment Bank.

Also the feasibility study for the upgrading of Al Ghadir wastewater pre-treatment plant (south Beirut) was updated. The CDR raised the necessary funds to cover the costs of phase I of these works, estimated at US\$ 173 million, through negotiations held with the European Investment Bank and the Islamic Development Bank.

On the other hand, the CDR obtained a US\$ 100 million additional funding for the continuation of water wastewater projects in a number of coastal and inland Lebanese regions, including the Akkar coastal area. The cost of the project of wastewater collection and treatment in Akkar coastal Area is estimated at around US\$ 40 million. Preparations are underway to release the first associated call for tenders, and to continue the construction and installation of waste water networks in the Chouf coastal area connected with the wastewater treatment plant in Ras Anabi Youness.

II- Protection of water sources against pollution: The Ministry of Energy and Water and the CDR have identified around 20 wastewater projects near to water sources (springs, rivers, lakes, etc.) in inland Lebanese areas. Detailed studies are completed for many of the projects that mostly fall within the framework of on-going financing agreements (Italian Protocol, the Islamic Development Bank and the Arab Fund for Economic and Social Development (AFESD)). A special focus is directed towards the West Bekaa area, Qaraoun Lake and the Litani River, where the high level of water pollution requires an urgent intervention to install wastewater collection lines and treatment facilities.

The CDR had also raised funds to conduct a study and implement the wastewater project in the upper basin of the Litani River through a US\$ 85 million loan agreement signed with the Arab Fund for Economic and Social Development (AFESD) to finance water and waste water projects in a number of Lebanese areas; same applied to Shebaa and neighboring areas, Becharre, As Safa and Barouk where sites works have been

launched. The CDR is also seeking an additional loan of US\$ 100 million to fill the financial gap and continue the implementation of these projects.

The CDR also obtained a EUR 6 million loan and signed two other US\$ 14 million loan agreements with the German Agency KfW to implement the project aimed at protecting the Jeita spring against pollution, at an estimated cost of US\$ 38 million. The related studies are underway. The project is divided into three phases aiming at collecting and treating wastewater generated from cities and villages falling within the water basin of Daraya, Kleiat, Bekaata, Bkaatouta, Kfardebian and neighboring cities in Keserwan district.

The CDR continues to conduct the necessary studies as a preparatory step for the launching of two projects for wastewater collection and treatment in Mechmech – Akkar and Hrajel – Keserwan, estimated at around US\$ 55 million, funded by the Italian Protocol.

The CDR is also preparing to release a call for tenders to outsource the execution of site works to collect and treat waste water in a number of villages in Central Bekaa (Anjar – Majdel Anjar- Souairi-Bar Elias-Kab Elias- Marj...), with a financial assistance from the Italian Protocol.

The CDR also received a US\$ 46 million loan from the Kuwait Fund for Arab Economic Development to install wastewater collection and treatment systems in numerous neighboring villages of Marjeyoun and Bint-Jbeil in Nabatiyeh.



Schedule of main contracts signed in the wastewater sector during 2014

Project	Estimated value US\$	Source of Funding	Commencement Date	Scheduled Completion Date
Study and implementation of the sea outfall pipeline that discharges the waste water from the treatment plant located in coastal Tyre into the sea	15,820	European Investment Bank	Oct-14	Nov-16
Construction and installation of main waste water collection networks in the coastal area of Metn located in Beirut River Water Basin	21,81	European Investment Bank	May-14	May-16
Annex to the contract pertaining to the construction and installation of wastewater networks and pumping stations in the coastal villages and towns of Chouf connected with the wastewater treatment plant located in Ras Anabi Youness	2,24	Arab Fund for Economic and Social Development and the Lebanese Government	May-14	May-15
Annex to the contract pertaining to the construction and installation of wastewater networks and pumping stations in the coastal and central villages and towns of Koura – Phase I	5,066	French Development Agency and Lebanese government	Aug-14	Mar-15
Execution of domestic connections connected with waste water networks and pumping stations in the coastal villages and towns of Koura – Phase I	2,91	Local	Dec-14	Dec-16
Annex to the contract pertaining to the construction and installation of wastewater networks in the Union of Municipalities of Chouf-Souejani, with a US\$ 3 million local funding.	3,07	Local	Jul-14	Sep-15
Annex to the contract pertaining to the construction of three treatment stations and affiliated wastewater networks in Yohmor, Kfar Sir and Zoutor, at an estimated value of around US\$ 2,4 million, funded by the	2,40	European Commission and the Lebanese Government.	Feb-14	Feb-15
Annex to the contract pertaining to the construction and installation of wastewater networks in the Union of Municipalities of Chouf-Souejani	3,07	Local	Jul-14	Sep-15
Annex to the contract pertaining to the construction of three treatment stations and affiliated wastewater networks in Yohmor, Kfar Sir and Zoutor	2,4 0	European Commission and the Lebanese Government.	Feb-14	Feb-15
Installation of wastewater networks connected with the Kfarkatra Refinement Plant -Chouf	0,998	Local	Nov-14	Nov-15

Schedule of main projects under preparation in the wastewater sector 2015-2017

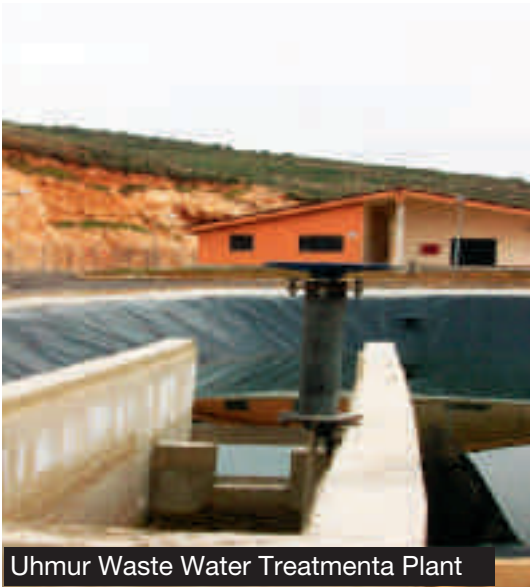
Project	Estimated value million US\$	Source of Funding	Date expected to initiate work	Expected completion
Program of Protection of the Lebanese Coast against pollution				
Construction of wastewater collection networks and a waste water treatment plant in Akkar coastline	40	Arab Fund + Local Funding	Sep-15	Nov-18
Construction of wastewater collection networks and two wastewater treatment plants in Keserouan coastline	175	European Investment Bank + French Development Agency + EU + NIF	Dec-16	Dec-20
Construction of second part of wastewater collection networks and primary treatment plant in Beirut River Basin	45	European Investment Bank	May-16	May-19
Expansion and upgrading of the wastewater treatment plant in Ghadir south of Beirut	97	Islamic Development Bank	Dec-16	Dec-20
Execution of wastewater networks in Sour coastline – Phase II	39	Local funding	Oct-15	Oct-17
Program of Protection of water sources against pollution				
Execution of collection networks and wastewater treatment plant in Mechmech – Akkar	31	Italian Protocol	Feb-16	Dec-18
Construction of collection networks and wastewater treatment plant in Dannieh	19	Italian Protocol	Dec-17	Dec-19
Construction of wastewater treatment plant in Bcharre	8	AFESD + Local funding	Jun-15	Sep-17
Construction of collection networks and wastewater treatment plant in Hrajel-Keserouan	24	Italian Protocol	Feb-16	Dec-18
Construction of collection networks and wastewater treatment plant in Jeita-Keserouan (Sections 1, 2 and 3)	38	German Agency KfW	Jun-16	Jun-19
Continuation of wastewater networks in Chahhar in Aley district	5	Local Funding	Feb-16	Feb-17
Continuation of wastewater networks in Jezzine	5	Local Funding	Feb-16	Feb-17
Continuation of wastewater networks in BintJbeil and neighboring areas	11	Italian Protocol	Dec-17	Dec-20

Project	Estimated value million US\$	Source of Funding	Date expected to initiate work	Expected completion
Completion of waste water collection network for ghadeer waste water treatment plant in South Beirut	86	European Investment Bank	Dec-16	Dec-20
Wastewater treatment plant and wastewater networks in Hasbaya and neighboring areas	8	Italian Protocol	Dec-16	Dec-20
Waste water treatment plant and wastewater networks in Arqub	30	Arab Fund + Local Funding	Jul-17	Dec-19
Wastewater treatment plant and wastewater networks in Jbaa and neighboring areas in Nabatiyeh	7	Italian Protocol	Jul-17	Dec-19
Construction of wastewater treatment plant and collection networks in Hermel and neighboring areas	20	Italian Protocol	Jul-17	Dec-19
Construction of wastewater treatment plant and collection networks in Laboueh and neighboring areas	15	Local funding	Jul-16	Dec-18
Continuation of water and wastewater networks in a number of villages in Baalback	10	AFESD + Local Funding	Mar-17	Mar-19
Construction of wastewater treatment plant and wastewater networks in central and northern Bekaa in the Litani basin	30	AFESD + Local Funding	Jul-16	Dec-18
Construction of wastewater treatment plant and wastewater networks in Anjar, and MajdalAnjar, Phase I	26	Italian Protocol	Dec-15	Dec-18
Construction of wastewater treatment plant and wastewater networks in Anjar, and MajdalAnjar, Phase II	24	World Bank (promised)	Dec-16	Dec-19
Wastewater collection and treatment in numerous neighboring municipalities of Marjeyoun and BintJbeil districts in Nabatiyeh	58	Kuwait Fund	Mar-16	Mar-19
Construction of wastewater networks in Rachaya and neighboring areas	5	Local funding	Jan-16	Dec-16





Kfarsir Waste Water Treatment Plant

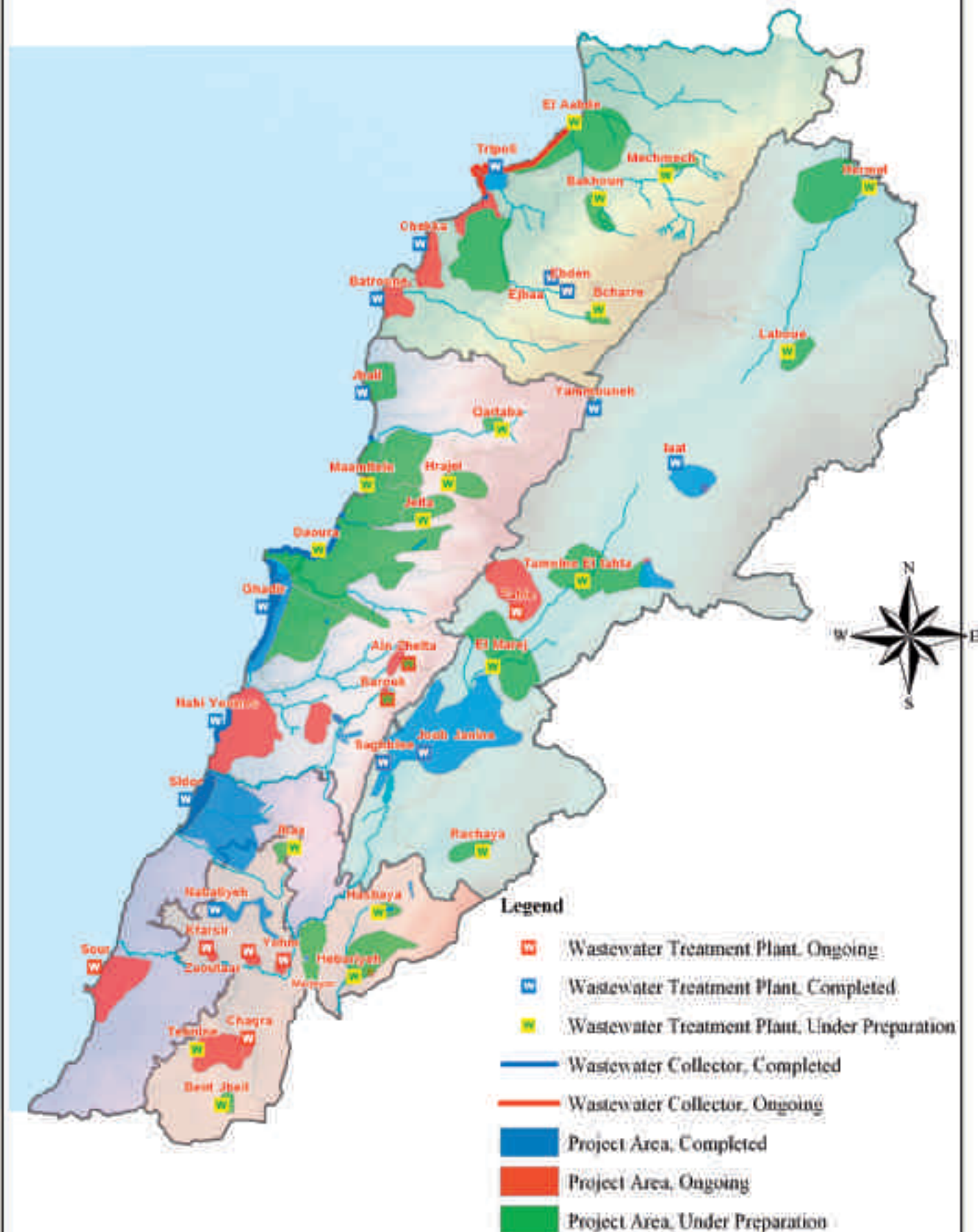


Uhmur Waste Water Treatment Plant



Bchare Waste Water Treatment Plant

Wastewater Completed, Ongoing & Under Preparation Projects



HOUSEHOLD SOLID WASTE

Overview of Household Solid Waste Sector

In a general sense, waste is a broad term that refers to everyday items consumed by the public or materials left behind by a human activity or process, and which, due to their physical and/or chemical and biological properties become of no value and therefore neglected and intended to be discarded or disposed of. In Lebanon, the current legislations governing waste, the waste management practices and the majority of CDR's projects and contracts all tackle domestic solid waste commonly known as Municipal Solid Waste (MSW). Other types of waste should however be treated by the private entities producing such waste, under the guidance and full supervision of the concerned ministries, according to the "polluter pays" principle, as stipulated by applicable laws and regulations.

Background and context: the concerned authorities in Lebanon have been working towards the promotion of a comprehensive waste management plan that is compatible with the prevalent socio-political situation. This plan aims at translating into actions the desired waste management expectations, in complementarity with sustainable development principles of other national programs and policies, something that would ultimately reduce environmental degradation.

The Council of Ministers' decision No.1 dated 30/3/2010 established a committee headed by the Prime Minister and composed of the Minister of Dis-

placed, The Minister of State for Administrative reform, the Minister of Interior and Municipalities, the Minister of Environment, the Minister of Energy and Water and the President of CDR. This committee was commissioned to develop a comprehensive waste management plan proposal covering all Lebanese regions, and tackling in particular the following:

- Techniques and methods to be adopted for the implementation of the plan;
- Suggested sites for the implementation of the plan;
- Fund raising mechanisms;
- The plan oversight authority.

The committee was also requested to present recommendations concerning the measures and procedures to be taken with regard to the temporary landfill in Naameh.

And on 1/9/2010, the Council of Ministers issued decision No. 55, to endorse the recommendations of the inter-ministerial committee summarized below:

- 1-Adopt thermal decomposition and waste-to-energy technologies in large cities;
- 2-Adopt the 2006 master plan and study the possibility of adoption of thermal decomposition in the rest of the country;
- 3-Engage and facilitate the tasks of the private sector in the provision of Solid Waste Management Services through turnkey participation (from collection to final treatment) or through the following two different options:
 - a.Collection
 - b.Treatment
- 4-Mandate the Ministry of Environment (MoE) and the CDR to merge their respective proposed plans, in synergy with what was agreed upon above;
- 5-Mandate the Ministry of Energy and Water to propose a

legislation that entitles the private sector to produce and sell energy generated from waste;

6-Offer incentives to the municipalities that will host waste treatment facilities: thermal decomposition plants, processing stations, composting stations and landfills;

7-Mandate the CDR, in coordination with the MoE, to contract an international consulting firm to:

- Select the most appropriate and proven solutions adapted to the Lebanese case (based on the spirit of the plan);
- Develop the terms of reference for the preliminary shortlisting of the thermal decomposition companies (Due diligence to short list only proven technologies);
- Assess and classify companies;
- Draft terms of reference for the final tender;
- Bids appraisal;
- Monitor the implementation

8-Mandate the Ministry of Environment to contract an international consulting firm to control the quality of the workflow according to the spirit of the plan and ensure good work progress;

9-Mandate the Ministry of Environment to hire a local consulting firm to conduct an awareness and guidance campaign aimed at winning the public approval on the thermal decomposition technique ;

10- Vest the Prime Minister with the power to oversee implementation and secure funding, while benefiting from successful experiences in neighboring countries.

Main Challenges:

- One of the biggest challenges facing the household waste in Lebanon lies in landfill locations, whether they are ordinary dumps or landfill sites for final dumping



following sorting and recycling; another challenge is dealing with waste before reaching the dumps. Therefore, the emphasis should be moved towards recycling and composting.

- Solid waste management constitutes also a great challenge from a financial perspective, in particular in a developing country like Lebanon, due to the absence of sufficient adequate regulatory legislations.

- The legislations on household solid waste management in Lebanon are shallow, contradictory and unclear, especially with respect to the role and tasks distribution between the concerned departments and ministries. A draft law on integrated waste management is currently underway.

- The Union of Municipalities, upon the administrative and technical support of the Ministry of Environment and Ministry of Interior and Municipalities, should consolidate the efforts for the selection of locations for dumps and sorting and composting facilities. This will be achieved through the establishment of a constructive dialogue and consultation process with the civil society, who would hinder the implementation of projects, if not included in the process.

Main achievements of the (1992-2013) period

The Lebanese governments had not adopted a central policy or a unified management strategy for the treatment of solid waste in Lebanon, due to the fact that waste management used to fall within the prerogatives of municipalities, who acted as the administration overseeing the proper execution of these services. However, the Lebanese civil war caused a negative impact on the municipalities' financial, administrative and technical capacities, which reflected negatively on the continuity of these

services. In the beginning of 1992, the government assigned the management of this sector in the capital and the suburbs to CDR, due to the incapacity of municipalities to deal with this problem. Since that date, the CDR has been working, in coordination with the concerned ministries, to put in place a comprehensive policy that provides the best solutions for Lebanon.

Emergency plan for the treatment of solid waste in Greater Beirut: Following the closure of the Bourj Hammoud dumpsite in January 1997, the government decided to implement an urgent plan for the treatment of solid waste in Greater Beirut. A contract was signed with SUKOMI to expand and raise the capacity of the Amrousieh and Qarantina solid waste treatment plants, upgrade the sorting process, separate recyclable material and extract compost material. This plan also included the construction of sanitary landfills for Greater Beirut and its suburbs. Two sanitary landfills were established in Na'meh and Bsalim. Both are currently in operation.

Rehabilitation of Tripoli dumpsite: The uncontrolled dumpsite located on Tripoli coastline has been rehabilitated. A sea wall was constructed around it to reduce environmental risks. Moreover, the necessary equipment for operating the dumpsite in an environmentally friendly way was procured in order to upgrade solid waste management in Tripoli region. The dumpsite has been in operation since 1998.

Construction of Zahleh sanitary landfill: The new sanitary landfill serving Zahleh caza is complete and the required vehicles and equipment for its operation have been procured. The works and procurements were financed by the World Bank. This dumpsite has been in operation since

2001.

Implementation of a sanitary landfill and a solid waste treatment plant project in the framework of the comprehensive waste management plan in Baalbeck caza.

Procurement of waste collection equipment for various regions: Within the framework of the urgent program, the World Bank funded the procurement of waste collection equipment, including vehicles, street sweeping equipment and special containers. These were distributed on all Lebanese regions. In the second phase of this project and within the framework of the Household Solid Waste Management Plan (SWEMP), the World Bank funded the procurement of waste collection and street sweeping equipment for the regions where construction works of sanitary landfills or rehabilitation of uncontrolled dumpsites were completed, such as Beirut, Zahleh and Tripoli.

Hospital waste treatment: In 1998, the CDR awarded the hospital waste treatment study, funded by the World Bank, to ERM. Several phases of the study are complete. This has allowed concerned parties to take decisions regarding the most appropriate means for hospital waste treatment. The Ministries of Environment and Public Health together with CDR have decided to build a central incinerator, which complies with international standards and operates at a minimum temperature of 1200°C, as a possible means of hospital waste treatment. The environmental impact assessment and the design study have not been prepared because the appropriate construction site has not been identified yet.



Marketing of compost and recyclable material: The feasibility study for marketing organic compost and recyclable materials generated by the Quarantina, Amroussieh and other treatment plants was completed by AR-CADIS/ EUROCONSULT in December 2003. The study was financed by the World Bank within the framework of SWEMP.

Financial audit of amounts due to SUKLEEN and SUKOMI: According to the Council of Minister's Decision No. 16 dated 14/8/2003 concerning the launching of an international tender for constructing and operating the solid waste treatment plants and landfills for a period of ten years, and in order to ensure the success of this tender, CDR was assigned to audit the amounts due to SUKLEEN and SUKOMI. Accordingly, the audit contract was awarded on 18/9/2003 to PRICEWATERHOUSECOOPERS, which is an international audit firm.

Technical Assistance for identification of treatment plants and landfill locations and preparation of environmental impact assessment: To implement the Council of Minister's directives concerning the identification of treatment plant and landfill locations, CDR awarded the impact assessment to Consultant Rafic Khoury who started his mandate in the third quarter of 2003. The Consultant prepared the environmental impact assessment of the locations identified by the technical committee commissioned with this task.

The comprehensive Household Solid Waste Management Plan: The CDR put in place a compre-

hensive plan that was approved by the Council of Ministers in 2006. The plan is based on the following principles:

1-Recycling and composting to the greatest extent in order to minimize the quantity of dumped waste; and distribution of recycling, sorting and composting plants on all cazas, with one or more sanitary landfills in each service area.

2-For this purpose, Lebanon shall be divided into four service areas:

- The North and Akkar governorates
- The Bekaa and Baalbeck-Hermel governorates
- The South and Nabatiyeh governorates
- Mount Lebanon and Beirut governorates

3-Create an incentives scheme for the municipalities that will host sorting stations, composting plants, sanitary landfills or incinerator centers. These municipalities will be paid a certain amount per every ton of solid waste, as proposed in the plan and according to laws and decrees that will be issued in this respect.

4-Municipalities shall deal with sweeping, collection and transport of waste to sorting stations and composting plants at their own expenses.

5-The contractor shall be responsible for financing the relevant study, executing and preparing the sanitary landfills, incinerator centers, sorting stations and composting plants. The contractor shall also be charged with the management

of these facilities for ten years on the basis of a certain fee per each ton of transported and treated waste.

Maritime and back-filling works in Saida waste mountain area: the Council of Ministers issued Decision No. 37, dated 26/5/2009, directing the CDR to develop the necessary studies and draft decrees, and to implement the maritime and back-filling works in Saida waste mountain area. Funding is secured through the US\$ 20 million grant donated by the Kingdom of Saudi Arabia, and the remainder of the cost is financed by the Lebanese government.

Progress during 2014:

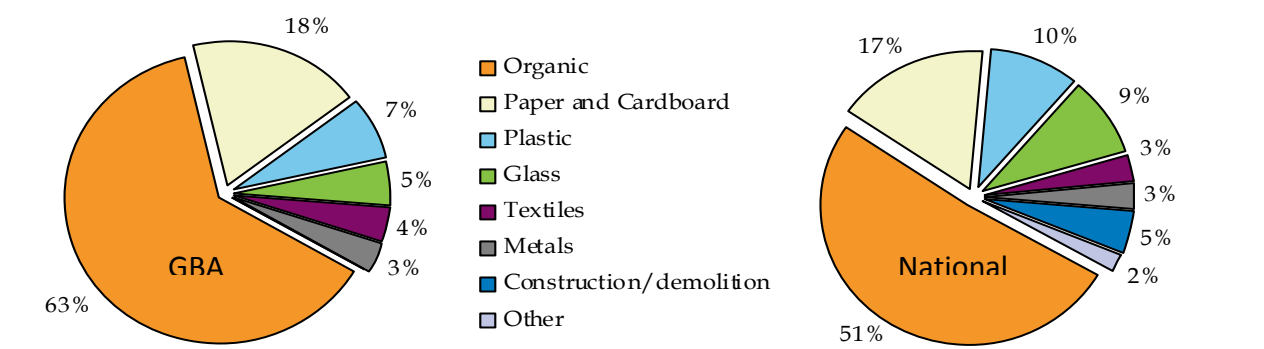
While contracts signed with Averda Group (Sukleen and Sukomi) were being implemented in due course in 2014, the Council of Ministers took consecutive decisions to prepare the grounds for the phase following the termination of these contracts by the beginning of 2015.

On 27/3/2014, upon the decision of the Council of Ministers an inter-ministerial committee was formed headed by the prime minister and composed of the following members: the deputy prime minister, Minister of Agriculture, Minister of Energy and Water, Minister of Finance, Minister of Interior and Municipalities, Minister of State for Administrative Reform, the Minister of Environment as a member holding a casting vote, and the president of the Council for Development and Reconstruction. At a later stage the Minister of Industry was included in this inter-ministerial committee upon the decision of the Council of Ministers. The Council of Ministers commissioned the said committee to develop a report on the comprehensive plan for



solid waste management, and to find alternative solutions to the landfills of Naameh and Tripoli.

After said committee held several meetings, and after the suggestions made by said committee had been discussed in several sessions held by the Council of Ministers, the latter approved to commission the CDR to develop a tender terms of reference to outsource a) the sweeping and collection processes and b) the treatment and dumping processes, upon the decision (46) issued on 30/10/2014 in which the service areas were divided into five areas covering the Lebanese territories.



AGRICULTURE AND IRRIGATION

1-Overview of the Agriculture Sector

- Current situation of the agricultural sector

Agriculture in Lebanon counts on individual initiatives, under a liberal and open economic system. During the past three decades, this sector has undergone major changes, among which:

- The number of farm holders working in agriculture grew by 36% to reach 195 thousand agricultural investors;
- The size of irrigated lands grew by 155% to reach 142 thousand hectares out of 277 thousand hectares of cultivated lands;
- The agricultural lands witnessed fragmentation, whereas the size of 75% of plots do not exceed 1 hectare and represent only 20% of the total cultivated area.

Despite the decrease in the sector's contribution to 6.3% of the GDP, agriculture accounts for 17% of the value of exports, and constitutes the sole source of income or an additional source of income for a large portion of the Lebanese rural population.

Agriculture consumes 85% of available water supplies. Increased water needs result in additional pressure on irrigated agriculture, leading to an increase in the number of abandoned lands due to lack of water or low investment opportunities and agricultural profits for small-holders.

The Lebanese agricultural production faces many challenges among which the high production costs and the limited com-

petitiveness.

Nevertheless, Lebanon's geographical location, its diversified climate and its production remain strong assets should the country seize available opportunities, make rational use of its natural resources – in particular water –, overcome obstacles in order to enhance its competitiveness, and preserve the environment.

• Main Challenges

There are two types of agriculture in Lebanon: commercial agriculture, generally efficient, modern, depending on adequate financial resources for investment and exploiting every potential profit. This type of agriculture is practiced in around 35 thousand farming units and covers about 25% of total agricultural holdings. It is based on the integration of pre-production and post-production agricultural activities, and on openness to foreign markets. The second type is an agriculture mainly devoted to the preservation of cultural and family heritage. It is practiced in smallholdings with no investment or profit opportunities, and considered as extra income and as subsistence agriculture. Most rural farmers practice this type of agriculture.

It is therefore important to distinguish between means intended to support the rural community, and those destined for the economic activation of the agricultural sector, and which target farms able to respond effectively.

As for agricultural markets, they are unstable and have an adverse effect on farmers' income due to the weakness and lack of transparency of marketing operations. This is also due to the marketing policies of operators

in the agribusiness which are not usually in the farmer's interest. Therefore, structures for three types of markets should be established: (1) the local market for fresh produce, (2) a market for products intended for processing, (3) a market for fresh agricultural produce and processed products intended for export.

Agricultural and rural cooperative movement is characterized by a lack of transparency and a disparate application of laws, and is thus far from the desired goals of collaborative work.

The agricultural sector also lacks the state's active role in keeping pace with technical developments in the fields of agricultural research, training and extension. The state failed to activate its role and coordinate between administrations concerned with the agricultural sector. Moreover, the technical and marketing information related to agriculture is insufficient, despite some achievements in the context of the comprehensive agricultural census, and despite the support provided by the national program of agricultural export support, "Export Plus", launched by IDAL.

Furthermore, the growing water demand in the upcoming years will require: (1) providing additional sources by building water storage dams, lakes and facilities, (2) rehabilitating and modernizing surface water and groundwater facilities, (3) regulating water use in order to make it more efficient, by adhering to a suitable legal framework.

The Israeli war of July 2006 had a very negative impact on the Lebanese economy in general, including the agricultural sector which, in addition to its original problem of lack of outlets, incurred heavy losses that



exhausted those working in it and increased Lebanese farmers' frustration. To face all these challenges, it was imperative to assess damages, make a quick contingency plan and provide the necessary funding for it, simultaneously with the initial plan intended for this sector.

• A Vision for the Future

To address the growing water needs in the future, an integrated development plan should be put in place to manage the use of available water resources by rehabilitating existing facilities, finding additional water sources, building dams and lakes and rationalizing water use.

The implementation of irrigation projects will increase the area of irrigated lands to around 36 to 50 thousand hectares in the next thirty years, which will increase the agricultural production and improve farmers' income. It all depends on the competitiveness of agricultural products in terms of production and marketing factors e.g. 1) selecting processed added-value agricultural products 2) ensuring continuous market supply of quality products in sufficient quantities and on time, and 3) examining the development of investable farming units.

Technical, statistical and marketing data play a pivotal role in agricultural development, therefore management facilities and professional organizations are likely to attach great importance to the creation of an information system that allows all the persons working in agriculture, farmers in particular, to obtain the information they need promptly.

The Lebanese government should develop future strategies and plans and create agricultural policies and legislations. It should also provide oversight and control in consultation with

private sector stakeholders. In this context, the 2010-2014 strategy of the Ministry of Agriculture focused on the main sectors with development potential (such as olives, grapes, certified seeds, flowers, organic agriculture and the development of the fisheries sector), and on projects aimed at modernizing production and exports chains. The strategy focused also on developing laws regulating the exploitation of agricultural lands, quality assurance and quality control, as well as the creation of policies and laws regulating the activities of agricultural and marketing companies, with due regard to the importance of provision of extension services at all levels and in all agricultural areas, in coordination with local authorities.

Moreover, rural development has become a necessity for balanced development. It is based on the establishment of integrated anti-poverty programs taking into consideration the particularities of rural areas, and involving the development of social sectors and the provision of minimum living allowances and job opportunities. The implementation of an integrated plan to preserve the environment and the natural resources, in complementarity with concerned parties, as well as the adoption of a participatory approach with local communities, are therefore required.

2- Main achievements until 2014

The CDR initiated the implementation of agricultural projects that have been prepared over the past years within the scope of sectoral development programs such as the National Emergency Rehabilitation Plan (NERP), in collaboration with the concerned ministries.

Before putting the agricultural

strategy in place, the CDR implemented urgent projects that are likely to contribute to the development of the agriculture and irrigation infrastructure, in particular the rehabilitation of agricultural schools (Fanar, Ghazir, Abdeh, Baaqleen, Nasriyet Rizk and the Kfarshima silk factory) through a loan provided by the Saudi Fund for Development (SFD).

In view of the Ministry of Agriculture's need for technical assistance in conducting sectoral studies and agricultural surveys, the CDR sought a grant from the European Union to finance and implement a project to support agricultural planning. As a result, the elements and the master plan of the agricultural policy were set out, in coordination with the agricultural census technical assistance project implemented by the CDR under a contract signed with the FAO and partially financed by a World Bank's loan. The project led to the creation of the agricultural strategy and a five-year agenda for the Ministry of Agriculture (2005-2009).

Concerning irrigation, around 27 thousand hectares of agricultural lands were rehabilitated through a World Bank's loan allocated for the rehabilitation of irrigation projects in Qasimiya (3600 ha), WestBekaa (2000 ha), Yammounneh (4500 ha), Dan-niyeh (4400 ha), Akkar el Bared (1500 ha) in addition to medium and small projects in the North and Mount Lebanon (7500 ha) and in the South (3200 ha). This loan also served to finance the capacity building of the Ministry of Hydraulic and Electric Resources (MHER) and the Litani National Authority (ONL), and to procure vehicles, equipment, instruments, advisory contracts,



training and conduct studies that facilitated the implementation of these projects. A part of the advisory functions pertaining to the Canal, 800 Project aimed at transporting water from the Litani River to South Lebanon to be used in irrigation and drinking water supply– Phase I., was completed.

In addition to the above, the CDR has contributed to external fund raising for the implementation of the Agricultural Infrastructure Rehabilitation project in favor of the Green Plan/MoA, which includes land reclamation, agricultural roads and support walls. The CDR also allocated funds from its annual budget to the project on the rehabilitation of livestock production for smallholders in Bekaa.

The CDR also participated, through coordination committees, in the implementation of several projects, among which the agricultural support project provided in the framework of the Italian/Lebanese Protocol (1997) and (1998-2000) signed with the CDR, of which a part was allocated to the Baalback- Hermel agriculture development project and to the certified plant production project.

The CDR also followed up with the olive cultivation development project in marginalized regions with the help of IAM-BARI, thanks to a grant allocated to the project by the Italian project, among many other projects.

Moreover, a loan from the International Fund for Agricultural Development (IFAD) financed the implementation of projects aiming at strengthening the capacities of the Ministry of Agriculture and its affiliated institu-

tions (the Green Plan and the Agricultural Research Center); Contracts were signed to supply vehicles and necessary equipment and instruments, and contracts for the rehabilitation of agricultural extension centers in Sour and Abdeh, and the rehabilitation and equipment of laboratories and greenhouses for research institutes in Sour, Fanar and Tal Amara. Technical assistance, studies, training and maintenance necessary for these institutions were provided through advisory services contracts.

The IFAD loan also permitted the provision of agricultural extension services in all areas of irrigated agriculture, through the implementation of advisory contracts with NGOs, as well as the construction of small mountain lakes in locations specified by the Green Plan in Bcharre, Mechmech, Bkaasfreen, Bkoufa, Hermel, Deir el Ahmar and Kfarmishki. As for the mountain lakes already constructed by the CDR through the IFAD loan, all related works concerning lakes in Bkaasfreen (Minieh-DiniyehCaza) and the lake of Bkoufa (Zgharta Caza) were completed. Concerning the lake of Mechmech (AkkarCaza), the CDR conducted the study related to the necessary repair works.

The CDR also allocated US\$ 8,4 million of the OPEC loan to the “«Green Plan – المشروع الأخضر»” with a view to finance the Hilly Areas Sustainable Agricultural Development Project “Hasad” aiming at constructing hills lakes to promote agricultural development as an additional irrigation source during summer in poor rural areas where water is scarce.

In 2012, the following projects were also completed: 1) construction of an irrigation line in Khiam, 2) construction of a

rainwater drainage network in Nabatiyeh, 3) rehabilitation of a water pond in BintJbeil (Nabatiyeh District), and 4) construction of agricultural roads in Aarkoub, Yohmor and Tibeh (Nabatiyeh District). The CDR had initiated these works in 2010 owing to an EU grant (Grant ENP/2007/018-882).

In addition, the CDR continued to provide oversight over the implementation of the Water Development Project in Marjeyoun that has been officially launched in mid April 2010. This project prepared the infrastructure and facilitated the installation of an irrigation distribution system in the northern part of Marjeyoun, into which water will be supplied from Canal 800. The project also conducted trainings on modern irrigation techniques and cropping patterns that have socio-economic impacts. The project targets 522 hectares and is expected to benefit 1259 farmers in the area. This initiative is funded by the Government of Spain through the “Lebanese Recovery Fund” established after the July 2006 War and managed by the United Nations Development Program (UNDP) in close collaboration with the Litani River National Authority and the Association of Friends of Ibrahim Abdel (AFIAL).

Regarding the Canal 800 Project aimed at transporting water from the Litani River to the South of Lebanon, to be used in irrigation and in drinking water supply– Phase I:

- The CDR signed a consultancy contract with the LahmeyerInt. GmbH/BJB Gauff/ingenieur/ D.A.H “Shair& Partners” Group, whereby the completion of the executive studies of all contracts is awarded to the Group. The consultant group also provided technical assistance in awarding the contract related



to the execution of works. After eliminating the administrative barriers faced by the project, the final draft of the contract was approved by the Arab Fund and the consulting group in terms of the supervision of the works execution until 2017.

- In 2012, the CDR awarded the implementation of the project to Kharafi/Veziroglu/Guris until 2017.

- Also in 2012, the CDR completed the execution of the contract related to the provision of institutional support and technical assistance to the Litani River Water Authority to provide oversight of the project that has commenced in 2007.

- Moreover, the CDR has initiated the implementation of the "Local Development Project in Northern Lebanon" ADELNORD, on the date of signature of its financing agreement on July, 6 2009. This project is funded by a European Union grant.

- As an initial phase, the CDR sought the assistance of a delegation of technical experts from the European Union (Framework Agreement I and II) to identify a list of priority projects related to agricultural infrastructure and prepare the social development component of the project and its requirements. In a second phase, the CDR signed a technical assistance contract with the merger group (GFA-ELARD) on October, 18 2010 for a period of 33 months. The technical assistance staff continued the implementation of the project's agricultural and social components under the supervision of the CDR.

It is worth mentioning that the technical assistance staff is located at the MoA's office in Abdeh in the region of Akkar, according to a Memorandum of Understanding signed between

the CDR and the MoA, stipulating that the latter puts a part of its Abdeh office under the project's disposition. In return, the project committed to rehabilitate and equip the building in order to allow its technical staff to implement the project's activities and be in constant contact with local authorities.

The CDR also appointed a field supervisor who is present daily at the project station in Abdeh, to oversee the management of the project, under the direct guidance of the CDR.

Within the framework of the same project, the CDR has awarded in 2011 the feasibility studies and the detailed designs related to the infrastructure component, which includes the repair of agricultural roads, as well as the repair and renovation of irrigation channels and the construction of water collection lakes. These projects were planned in the Framework Agreement I and examined by the technical assistance staff; these projects target all rural areas situated 400m above sea-level in the Akkar District as well as the mountainous areas of the Districts of Hermel and Danniyeh, namely: Akroum, WadiKhaled, Kobayat, Dreib, Joumeh, Al-Qayteh and Al-Jurd, Hermel and Danniyeh.

With regard to the award of contracts for feasibility studies and supervision tasks, the projects were merged into 6 groups, each including a list of agricultural projects, whereby group No.6 consists only of preparation of detailed studies and supervision of agricultural roads repair and renovation projects. Whereas groups 1 to 5 include the preparation of feasibility studies as a preliminary step, and the preparation of detailed studies and supervision of construction of agricultural roads, irrigation canals and hill lakes as

a second step, in all the project target areas.

During 2012, feasibility studies and detailed plans were completed and delivered to the CDR.

Also in 2012, the CDR awarded the works for the infrastructure component composed of 6 groups of projects aimed at rehabilitating agricultural roads and irrigation canals and constructing water collection lakes to a group of contractors after releasing calls for tenders in due form of law and in accordance with the European Union norms. Also the CDR extended the contracts awarded to the consultants to design the detailed plans for the supervision of implementation works in all areas covered by the project.

Furthermore, within the framework of the local development component of the ADELNORD project, nine village clusters were identified in 2011 distributed across the project target areas. The elaboration of a Local Development Plan for each cluster has been initiated through a participatory approach between local authorities and civil society organizations, with the support of the ADELNORD technical assistance team and under the supervision of the Economic and Social Fund for Development (ESFD).

In 2012, Local Developments Plans were completed for 9 clusters, and led to the identification of nine socio-economic development projects that respond to the needs of these rural areas. Based on this, contracts were signed between the CDR and each cluster represented by official local actors to implement these nine projects.



The environment component of the ADELNORD Project:

Moreover and in the context of setting out the requirements (terms of reference) relating to the development of a Sustainable Strategic Plan for the Districts of Akkar, Hermel and Danniye, the ADELNORD project - in coordination with the Ministry of Interior and Municipalities, and in cooperation with the public administrations involved in the development sector - launched an initiative to establish a standard methodology for regional development plan studies, after several donors expressed their readiness to finance regional development plan studies. The CDR will adopt this methodology in the preparation of the tender document of the strategic plan for the District of Akkar and the highlands of Hermel and Diniyeh.

And as part of the technical assistance provided for the creation of a national park in the mountainous areas of Akkar, ADELNORD project agreed with the Ministry of Environment to set forth the requirements to award a technical study on the creation and management of regulated natural reserves in Lebanon as a preparatory step for the creation of a national park in Akkar.

In 2012, as part of ADELNORD's activities, the said technical study was initiated in close cooperation with the Ministry of Environment. The study resulted in a detailed technical report and a draft law on natural reserves, which have been presented to the Ministry of Environment for review and approval.

Within the context of fire suppression and forest protection

and management, ADELNORD initiated in 2012 as a first phase the preparation of two management plans for the forests of Andaket-Akkar and Safira-Danniye, that resulted in the elaboration of the terms of reference relating to forest management including pruning, in close collaboration with the Ministry of Agriculture.

In 2013, the CDR presented to the Ministry of Agriculture a final report encompassing two management plans and two terms of reference related to the forests of Andaket-Akkar and Safira-Danniye, awaiting the approval of the Ministry of Agriculture.

Also contracts were signed with suppliers to purchase communication and advertising materials within the framework of ADELNORD Project, through the release of a call for tenders in accordance with applicable laws and under the supervision and upon the approval of the European Union.

It is worth noting that 160 contracts were signed in the agriculture sector between 1992 and the end of 2014, of which 134 were completed and 26 are current active projects, with a total value of US\$ 45, 96 million.

3- Work Progress in 2014

Regarding the Canal 800 Project - Phase I, aimed at transporting water from Litani River to southern Lebanon to be used in irrigation and in drinking water supply, Kharafi/Veziroglu/Guris has initiated the implementation plans, which are supervised by Lahmeyer Int. GmbH/JBJ Gauff/ingenieur/D.A.H "Shair& Partners".

Several agricultural and irrigation projects are currently underway at municipal level, at the

initiative of the "Social Development Fund", through a European Union grant and contributions from concerned municipalities in particular in the South and Akkar.

Regarding the Hilly Areas Sustainable Agricultural Development Project "Hasad":

- In 2014, the CDR signed a Memorandum of Understanding with the "Green plan", regarding the implementation and disbursement mechanisms of OFID loan No. 1337PB allocated to this project;

- Twenty hill lakes locations were identified, and are scheduled for implementation under the Hasad project, across five Mohafazat as follows: Bawadi, Younin, Amayriye el Moudwe, Barqa, Zrazir, Ain El Benieh, Nahle (Bekaa), Aita el Chaab, Aitroun, Beit Lif, Chebaa, Kfarchouba, Majdel Selm (Nabatiyeh); Ehmej, Baadran, Kfarmatta, Kornayel, Mechmech (Mount Lebanon); Karm el Mahr (North) and Minjiz (Akkar).

- Contracts were awarded to implement and supervise works related to eight hill lakes as a first phase - that are: Bawadi, Ain El Benieh, Nahle (Bekaa), Aita el Chaab, Aitroun, Beit Lif, Chebaa (Nabatiyeh) and Ehmej (Mount Lebanon).

In the framework of the "TECHNICAL ASSISTANCE TO THE LOCAL DEVELOPMENT SUPPORT PROJECT IN NORTH LEBANON" ADELNORD, funded by the European Commission, the CDR continues the implementation of the project launched in 2010 in coordination with the technical assistance staff (GFA-ELARD) and the field supervisor, as well as the Economic and Social Fund for Development (ESFD), in terms of implementing the different components of the project.

In the context of the same proj-



ect, and under the agricultural infrastructure component, the CDR initiated the supervision of implementation plans in different target areas.

In 2014, the CDR initiated the activities of the infrastructure component composed of six groups of projects i.e rehabilitation of agricultural roads, restoration of irrigation canals and construction water collection lakes.

As for the local development component of ADELNORD, in 2014, the nine development and social plans were still active under the supervision of ESFD, in nine clusters of villages across the project target area, summarized as follows:

Cluster	Proposed Project
Fnaideq	- Creation of waste treatment plant
Machta Hassan	- Equipping of medical center
Hrar	- Rehabilitation of irrigation canals
	- Equipping of vocational training center
	- Socio-cultural municipal complex
Beit Youness	- Rehabilitation of irrigation canals
	- Purchase of waste containers and waste collection vehicles
Old Akkar	- Installation of an integrated system for waste water treatment
Wadi Khaled	- Equipping and improvement of the services of Makassed Health Center
	- Equipping Schools and improvement of vocational and school education
Kfarbanine- Dinniyeh	- Rehabilitation of drinking water and irrigation network
	- Equipping of a health center
	- Construction of a school playground
	- Development of capabilities and skills of civil societies in the region
South Hermel	- Digging wells, rehabilitation of networks and drinking water storage
	- Support agricultural cooperatives
North Hermel	- Digging wells, rehabilitation of networks and drinking water storage

Concerning the environmental component of ADELNORD Project, the following was achieved in 2014:

1)The “Development of a Sustainable Strategic Plan for Akkar, Hermel and Danniye” has been initiated, in coordination with a team of experts specialized in environment and economic sciences, urban planning and social development, assigned by the technical support company (GFA -ELARD) established for this purpose. In this context, the chapter on Current Diagnostic and the draft plan were completed, in coordination and consultation with local authorities.

2)The concerned parliamentary committees approved the Natural Reserves Draft Law that was drafted by the CDR and presented by the Ministry of Environment. In 2014, the CDR, with the support of ADELNORD, completed the Draft Implementing Decree of the Law on Natural Reserves and presented it to the Ministry of Environment.

3)Within the framework of Fire Suppression and Forest Protection and Management, the CDR initiated the Phase II of this mandate, upon the request of the Minister of Agriculture, in particular the following:

1. Implementation of a training program targeting forests guards and local activists;
2. Supply of forest management tools and supplies;
3. Propose a follow up mechanism to implement the two management plans of the Forest of Andekt and Safira.



Moreover, the CDR, through its participation in coordination committees, is following up on projects implemented by the Ministry of Agriculture:

1. The committee formed to solve the issue of forbidden crops and propose alternative crops in the Bekaa.
2. The coordination committee for the "Economic and Social Development Project for Olive Producers in Poor Areas".
3. National Food Security Program committee in cooperation with the Food and Agriculture Organization of the United Nations (FAO)
4. The guiding committee of the Hilly Areas Sustainable Agricultural Development Project "HASAD".
5. The steering committee of the Lebanese Observatory for Agricultural Development.
6. The guiding committee for the Coordination Project between the Ministry of Agriculture and Italy.
7. The steering committee of Promoting the Production and Marketing of Lebanese Agricultural Production.
8. The coordination committee for the Agricultural and Rural Development Project (ARDP) funded by the European Union.
9. The national coordination committee for the United Nations Food and Agriculture Organization (FAO).

Through these committees the CDR get an insight of the main results of completed project and planned activities and the problems and challenges encountered.

4- Main Contracts Signed in 2014

Project	Estimated Value (USD)	Source of Funding
ADELNORD		
Appointment of field supervisor for the Local Development Support project in Northern Lebanon	315,000	CDR
Extension of the duration of a contract to conduct a preliminary study, a feasibility study and implementation plans for irrigation and agricultural roads projects (Group no. 2) in the highlands of Danniyeh	26,712	European Union (grant)
Extension of the duration of a contract to conduct a preliminary study, a feasibility study and implementation plans related to irrigation projects and agricultural roads (Group no. 3) in the highlands of Danniyeh	59,345	European Union (grant)
Execution of infrastructure works: agricultural roads, irrigation and hill lakes in WadiKhaled (Group no. 1)	25,773	European Union (grant)
Execution of infrastructure works: agricultural roads, irrigation and hill lakes in Danniyeh (Group no. 2)	121,826,817	European Union (grant)
Execution of infrastructure works: agricultural roads, irrigation and hill lakes in Hermel (Group no. 3)	2823242,80	European Union (grant)
Execution of infrastructure works: agricultural roads, irrigation and hill lakes in Wadi Khaled (Group no. 4)	42623	European Union (grant)
Execution of infrastructure works: agricultural roads, irrigation and hill lakes in Akkar (Group no. 5)	341863	European Union (grant)
Extension of the technical support contract for ADEL-NORD	394674,67	European Union (grant)
Litani River Canal 800 Project to transport water from Litani River to the South of Lebanon to be used in irrigation and drinking water supply - Phase I		
Works	1,462,803	- CDR
		- AFESD
		- KFAED
Studies and supervision	3,850,000	- CDR
		- KFAED
Hilly Areas Sustainable Agricultural Development project «Hasad»		

Bawadi el Bekaa	487.737 \$	OPEC + OFID
Ayn el Benieyh - Bekaa	445.714.97 \$	OPEC + OFID
Nahlet - Bekaa	318.122.25 \$	OPEC + OFID
Ain el Chaab – Nabatiyeh	295.895.45 \$	OPEC + OFID
Aitroun – Nabatiyeh	119.927.27 \$	OPEC + OFID
Beit Lif – Nabatieh	363.295.15 \$	OPEC + OFID
Chebaa – Nabatieh	313.176.99 \$	OPEC + OFID
Ehmej-Mount Lebanon	260.654.69 \$	OPEC + OFID

5- Main projects under preparation for 2015:

In the context of the Hilly Areas Sustainable Agricultural Development project “Hasad”:

The CDR will continue to provide oversight over the completion of works in the eight lakes awarded in 2014; the CDR will also continue to secure funding from the OPEC loan to construct the remaining planned lakes, in close collaboration with the “Green Plan – المشروع الأخضر”.

In the framework of the “Technical Assistance to the local development support project In North Lebanon” ADEL-NORD, funded by grant n ENPI/2008/019-623, the CDR will assume the following:

- Continue to supervise the completion of the infrastructure component, i.e. the renovation and repair of agricultural roads, as well as the rehabilitation of irrigation canals and the construction of hill lakes for water harvesting.

- Draft the final version of the Sustainable Strategic Plan for Akkar.

- Continue to supervise the implementation of priority local development projects in the different village clusters under the supervision of the Economic and Social Fund for Development (ESFD).

- Coordinate with the Ministry of Environment with regard to the approval and enforcement of the draft implementing decree on natural reserves.

- Coordinate with MoA with re-

gard to the endorsement of the two management plans of the forests of Andaket in Akkar and Safira in Danniyeh, and the two terms of reference for forest management including pruning, in the framework of fire suppression and forest protection and management.

As for the Canal 800 Project (Transfer of Litani River Water to the South of Lebanon)– Phase I: -The CDR will continue the implementation of the project which was awarded to Kharafi/Veziroglu/Guris in 2012.

- The CDR will continue overseeing the implementation of the project through the advisory contract with the merger group LahmeyerInt.GmbH/JBJ Gauff/ingenieur/D.A.H “Shair& Partners.

- In 2015, the CDR will seek to award the Supervisory Control and Data Acquisition (SCADA) contract, with the technical assistance of the consultant and in agreement with the Arab Fund.

- The CDR will also seek to secure the necessary loan (approximately US\$ 18,000,000) to implement Phase II of the project, expected to extend from 2015 to 2020, inclusive of studies, supervision and works phases.

It is worth mentioning that the implementation of this project will result in providing 90 million m3 annually by gravity irrigation for around 13,000 ha between the 800 m and 400 m levels of the Qaraoun Lake, in addition to providing 20 million m3 annually

of drinking water. The project is financed through two approved loans, the first provided by the Arab Fund for Economic and Social Development (AFESD) and the second by The Kuwait Fund for Arab Economic Development (KFAED).

Concerning the locally funded project for the restoration of the lake of Mechmech in Akkar, the CDR completed the tender document awaiting initiation of bidding process.

The CDR will continue to provide oversight over the work of the coordination committees in partnership with the Ministry of Agriculture, to follow up on the different agricultural projects and get an insight of the main results of completed works, upcoming activities and the problems and challenges encountered.



5- Main projects under preparation (2015)

Project	Estimated value (\$US)	Source of Funding	Expected date to resume work	Scheduled completion
Restoration of the lake of Mechmech	000 ,300	CDR	Jun-15	Sep-15
Water transfer from Litani River to the South of Lebanon for drinking water and irrigation–(Awarding Supervisory Control and Data Acquisition Contract SCADA) – under Phase I	2,242,000	AFESD - KFAED -	Feb-14	Feb-17
Water transfer from Litani River to the South of Lebanon for drinking water and irrigation (Canal 800) – Phase II: Studies, supervision and works	18,000,000	KFAED - CDR -	Jun-15	Jul-20

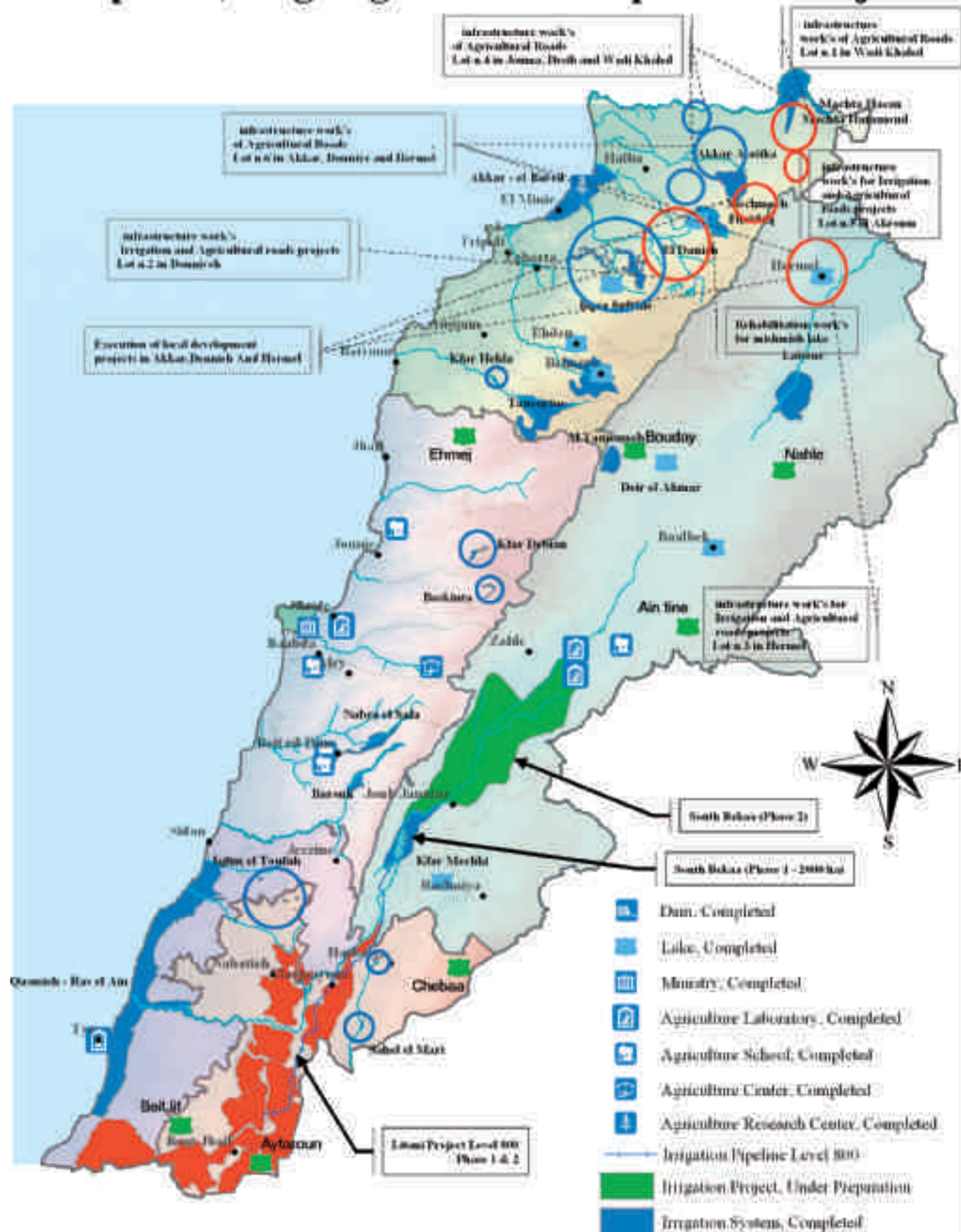


Aakar Agricultural Road



Aakar Agricultural Channel

Agriculture & Irrigation Completed, Ongoing & Under Preparation Projects



SOVEREIGN SERVICES

General Overview of the Sovereign Services Sector

The Administration of the Council for Reconstruction and Development (CDR) aims at addressing the needs of the Lebanese public institutions focusing primarily on the construction of new government facilities and the improvement of existing facilities. Within this framework, the CDR plans and implements, construction, repair, maintenance and operation projects. This plan reflects the Lebanese government's desire to construct ministries and public administrations facilities on state-owned real property, with a view to decrease rental costs of buildings actually used by the Lebanese public institutions and to improve the administrative performance of such buildings.

Main projects completed within the reporting period (1992 - 2014)

Up until 2014, a number of construction and facility improvement projects were planned, and completed. Three new governmental Serails were constructed in Jezzine, Tebnine and Hermel. A Justice Palace was constructed in Saida. Two quaimakamiya buildings were constructed in Minyeh and Sir el Denniyeh. Also, a building for the Ministry of Finance in Aadli-yeh – Corniche el Nahr region was constructed. A showroom was added to the National Museum which underwent also enlargement and water treatment works.

In addition, the UNESCO Palace, the historic building of the Grand Serail of Beirut as well as several border crossings were renovated and repaired; Renovations

and repairs were completed on the building of the Lebanese Radio (الإذاعة اللبنانية), the building of the Ministry of Tourism in Sanayeh, the building of the Lebanese Embassy in London, as well as on a number of other government facilities including municipalities. These projects were completed at a total cost of US\$ 200.00 million. Preparatory work was initiated to conduct a study on the construction of a consolidated building for the Customs Administration at the Port of Beirut.

Work progress in 2014, regarding contracts signed before 2014

Among the current active projects, a number of urgent projects were completed on the border crossings in Aaboudiye – Bqaiya – Aarida – Masnaa; in Roumieh prison a new building was constructed, and a new court room was added; a new fruit and vegetable souk was constructed in Tripoli. The total budget allocated for these projects is US\$ 20.00 million.

Projects under preparation

Studies are being developed to implement additional renovation and repair projects at the borders points in Masnaa, Aaboudiyeh, Aarida, and Bqaiya, and to add facilities to the Justice Palace of the city of Beirut. A study is also being developed to build a new facility for Basel Fleyhan Financial and Economic Institute. Other government construction and infrastructure studies in the pipeline: Construction of a big facility that will include the office of the Minister of State for Administrative Reform, the Civil Service Board and the Central Inspection; the construction of a new building for the Ministry of Foreign Affairs in Solidère, the construction of a new building

complementing the existing facility of the Industrial Research Institute (IRI) in Hadath. In the studies pipeline also: the renovation and rehabilitation of the governmental Serail in Baabda; the maintenance and rehabilitation of the facility of the National Institute for Administration; the outsourcing of studies to build prisons across all Lebanese territories, Serails in Halba, Baalback, Sour, and a justice palace in Nabatiyeh.



Abbasseye Municipal Building



Ansar Municipal Building



Yater Municipal Building

Sovereign service projects signed in 2011

Project name	Contract value (USD)	Funding Source	Initiation Date	Scheduled Completion
Preparation of detailed studies and tender and supervision documents related to phase I and phase II of the various «construction projects» at the Masnaa customs border point	1,669,389	Lebanese Government	Feb-10	Mar-13
Execution of components of phase I and phase II of the various «construction projects» at the Masnaa customs border point	1,169,893	Lebanese Government	Feb-11	Feb-12
Technical support and supervision of the implementation of the construction of an additional facility and a court room at the Roumieh Prison	155,423	Lebanese Government	Jan-11	Jan-13
Construction of an additional building and a court house at the Roumieh Prison	6,166,759	Lebanese Government	Jan-11	Jan-13
Construction of a public building for the municipality of Chakra at the Mouhafaza of Nabatieh	476,558	European Union	Jan-11	Jan-12
Renovation and Repair of the Ministry of Finance building (Headquarters) Riad el-Solh	116,562,930	Lebanese Government	Jan-11	Mar-12
Preparation of a study for the construction of a consolidated customs facility on a land annexed to the port of Beirut	440,000	Lebanese Government	Jan-10	12-Jul
Study on the renovation of the main building of the CDR	18,840	CDR's Budget	Feb-10	Aug-10



Sovereign service projects (under preparation)

Project name	Contract value (USD)	Funding Source	Initiation Date	Scheduled Completion
Study for site works execution at Halba Saray	174,000.00	Lebanese Government	Jun-15	Feb-16
Study for site works execution at Halba Saray	6,800,000	Lebanese Government	Jun-16	Jun-18
Study for site works execution at Baalback Saray	172,260	Lebanese Government	Aug-15	Apr-16
Execution of site works at Baalback Saray	6,800,000	Lebanese Government	Aug-16	Aug-18
Study for site works execution at Nabatiyeh Justice Palace	174,000	Lebanese Government	Jan-16	Aug-16
Execution of site works at Nabatiyeh Justice Palace	6,800,000	Lebanese Government	Jan-17	Jan-19
Updating the study pertaining to the execution of site works at Sour Saray	90,000	Lebanese Government	June 2015	January 2015
Execution of site works at Sour Saray	6,800,000	Lebanese Government	April 2016	April 2018
Establishing a unified customs building on a land annexed to Beirut port	20,000,000	Lebanese Government	Jan-16	July 2018
Renovation of customs building in Aarida	7,000,000	Lebanese Government	February 2016	August 2017
Renovation of customs building in Bqayaa	2,000,000	Lebanese Government	February 2016	August 2017
Renovation of customs building in Kaa	7,000,000	Lebanese Government	February 2016	August 2017
Rehabilitation of customs buildings in Aaboudiye	7,000,000	Lebanese Government	February 2016	August 2017
Rehabilitation of customs buildings in Sour	1,000,000	Ministry of Public Works Budget pursuant to Decree 2002/7606	March 2016	September 2017
Renovation and renovation of the building of the Ministry of Foreign Affairs building in «Solidere»	8,000,000	Lebanese Government	April 2016	April 2018
Adding up an additional annex to the Great Saray	7,462,022	Lebanese Government	February 2016	August 2017
Construction of Ministry of Finance building in Baabda	30,000,000	Lebanese Government	February 2016	August 2017
Project to renovate the CDR building	800,000	CDR Budget	December 2015	September 2016
Renovation of the section rented out by the Ministry of Finance in property No. 1383 in the Port cadastral area	1,000,000	Lebanese Government	December 2015	December 2016



Abbasseye Municipal Building



Ansar Municipal Building



Yater Municipal Building

FUNDING

Received Funding

The financial assistance granted to the Lebanese reconstruction program includes loan agreements approved by the government and ratified by the Parliament, and grant agreements enforced pursuant to governmental decrees. The total value of available foreign funds – grants and loans – received in the period from 1992 till the end of 2014 is US\$ 10,445 million, calculated at the exchange rates recorded at the end of 2014; the following table details out the total foreign funds received:

	Grants	Loans	Total
Amount in million USD[1]	3,180	7,318	10,498
% of total	30%	70%	100%

The Council for Development and Reconstruction (CDR) adopts a general policy to secure soft loans for social services sectors and commercial loans for high profitability sectors and projects (productive sectors). However, the CDR is not the only governmental entity responsible for implementing the reconstruction program. A number of ministries and governmental administrations also participate in implementing other parts of this program.

The foreign funding received by source: Around 46 funding sources have contributed to the reconstruction program, of which 24 main foreign sources contributed to more than US\$ 10 million each, as detailed out in Chart 1. It is noteworthy that 14 main foreign funding sources have contributed to more than 90% of the total foreign funds, i.e: the Arab Fund for Economic

and Social Development (AFSED) (14.52%), the International Bank for Reconstruction and Development (IBRD) (13.12%), Kuwait Government and the Kuwait Fund for Arab Economic Development (KFAED) (11.08%), the European Investment Bank (EIB) (10.52%), the Kingdom of Saudi Arabia and the Saudi Fund for Development (8.97%), the Islamic Development Bank (IDB) (8.72%), the European Union (EU) (7.27%), Italy (5.58%), France (4.07%), Qatar (3.12%), commercial banks (2.79%), the United States (1.73%), Germany (1.72%), and Japan (1.55%). The total value of the funds granted reached US\$ 10,498 million, an increase of US\$ 556 million compared to the total value of funds received by the end of 2013.

Distribution of foreign funding received by sector: Chart 2 details out the distribution of the total foreign funding received to date by main sectors. The share of foreign funds obtained by basic infrastructure sectors reached 35%, mainly focusing on electricity, telecommunications, and air, land, and sea transportation. The share of social sectors amounted to 25%, focusing on education, public health, housing compensations, youth affairs and sports, land arrangement and environment. The share of basic services sectors stood at 21%, focusing on potable water supply, wastewater and solid waste sectors. Whereas the productive sectors and other sectors accounted for 19%, including agriculture, irrigation, industry, tourism, private sector services, local and central administration and other sectors.

New Funding

The foreign funding obtained during 2014 reflects the efforts made by the CDR to translate

foreign funding promises into achieved funding, which would only require completion of certain legal and administrative procedures to become effective. The total value of foreign funding secured in 2014 amounted to around US\$ 824 million, of which loans worth of US\$ 738 and grants worth of US\$ 87 million. Below are summarized the main loan and grant agreements signed or ratified in 2014:

The World Bank (WB) 1.Municipal Services Emergency Project (Grant):

In 2014, a EUR 10 million grant agreement was signed between the World Bank and the Lebanese Republic (Ministry of Finance and the Council for Development and Reconstruction) to finance the Municipal Services Emergency project. The awarding of the first phase of the project composed of equipment procurement for 11 Federation of Municipalities has been initiated.

2.Cultural Heritage and Urban Development Project (CHUD) (additional loan):

A US\$ 27 million additional loan agreement was concluded with the World Bank to finance the Cultural Heritage and Urban Development Project (CHUD). The Project is currently active.

3.Lebanon Water Supply Augmentation Project (Construction of Bisri Dam):

In 2014, efforts were made to prepare the ground for an agreement to finance the Bisri Dam and the associated access roads project. The World Bank approved to grant Lebanon a US\$ 474 million loan to the project, of which US\$ 155 million is allocated for real property acquisitions and the remainder for construction works. The agreement was signed on 21/01/2015. The European Investment Bank



(EIB)

The aggregate value of the EIB's contributions in Lebanon up until December 2014, totaled EUR 1.42 billion distributed as follows: private sector support (34%), wastewater sector (34%), transportation (24%), energy (8%), and other sectors (1%).

The aggregate value of the agreements concluded and signed with the CDR is EUR 832 million. Awaiting Parliament ratification of the two agreements signed on 21/12/2012, the Highway Rehabilitation project agreement (Phase II) was presented to the Parliament on 25/02/2013 for ratification. On 22/05/2014, a draft law was presented to the Parliament concerning a loan agreement to finance private sector loans in energy efficiency and renewable energy.

In December 2014, the EIB approved to finance the expansion of Al Ghadir Waste Water Treatment Plant and the renovation of the plant connected networks (part of Beirut and western southern suburbs) with a ceiling of EUR 68,5 million, in the form of soft loan.

The Highway Rehabilitation Project loan agreement– Phase 2, finances the works and the provision of oversight over the expansion and renovation of Nahr El Kalb – Tabarja project A1, the construction of motorways, the construction of a new interchange, the construction of viaducts and bridges. The CDR is the executing agency. The EIB committed a EUR 75 million soft loan, of a maturity date of 20 years counted as from the withdrawal date.

The loan agreement intended to support private sector projects in the field of energy efficiency and renewable energy, finances loans granted to the private sector in the field of energy efficiency and renewable energy, in line with the Central Bank of Lebanon's policy aimed at supporting the energy sector and through financial intermediation

of commercial banks. The Central Bank of Lebanon is the executing agency. The EIB committed a EUR 50 million soft loan, of a maturity date of 15 years counted as from the withdrawal date.

The EIB also approved in December 2014 to co-finance with the Islamic Development Bank the expansion of Al Ghadir Waste Water Treatment Plant and the renovation of the plant connected networks (part of Beirut and western southern suburbs) with a ceiling of EUR 68.5 million, in the form of soft loan, provided that one of the waste water treatment stations in Tripoli or in Sour becomes operational.

The Islamic Development Bank (IDB)

In 2014, a number of financing agreements were prepared and approved by the Islamic Development Bank (IDB) of a total value of US\$ 398.7 million, of which two executive agreements worth US\$ 84 million within the Framework Agreement for the Reconstruction of Lebanon issued by Law 94 of 6/3/2010, and four new financing agreements worth US\$314.7, in addition to a financing agreement approved in the beginning of 2015 worth US\$ 60.97. The status of these agreements is summarized below:

The executive agreements approved by the IDB in 2014 as part of the US\$ 245 million Framework Agreement (US\$ 84 in total value):

1. Support of Primary Health Sector in Lebanon Project

On 1/9/2013, the Islamic Development Bank (IDB) approved to grant a US\$ 14,5 million soft loan to finance the Project on the Support of Primary Health Care in Lebanon within the Framework Agreement for the Reconstruction of Lebanon. The project aims at improving the

primary health care network, by constructing and equipping five new centers in Damour, Amchit, Bawadi, Khalwat and Ghobeiri and by renovating and equipping the existing health centers in Jbee, Terbol and Cana Hospital. The project aims also at providing institutional support to the health sector in Lebanon through the renovation and modernization of hospitalization services in the Cazas and the improvement of the capacities of the primary health care personnel. The IDB presented the draft agreement on 17/04/2014. The Council of Ministers approved to sign the Agreement. The Agreement was signed on 23/02/2015 and the CDR is awaiting the announcement of the Agreement's entry into force.

2. Road Network Improvement Project: Construction of North Expressway – (Eastern Ring of Tripoli) – Phase I

On 30/11/2014, the Islamic Development Bank (IDB) approved to grant a US\$ 69,5 million loan to finance the Road Network Improvement Project in Lebanon designed to construct the north expressway (Eastern Ring of Tripoli) – Phase I, within the Framework Agreement for the Reconstruction of Lebanon. The CDR prepared the studies and bidding documents related to this project. The IDB prepared the two draft *istisna'* and *wakala* agreements to finance the project. The CDR is awaiting the approval of the Council of Ministers to delegate the CDR Chairman to sign on behalf of the Lebanese Government.

The new financing agreements approved by the IDB in 2014 (US\$ 242 million in total value):

1-Completion of the southern coastal highway, Phase V – Part II, the section stretching from



Burj Rahal to the entrance of Abbasiyeh

On 24/8/2014, the Islamic Development Bank (IDB) has agreed to grant a US\$ 26.7 million loan to finance the completion of the southern coastal highway from Bourj Rahal until Abbasiyeh entrance. This section of the highway provides the ease of movement of citizens between the coastal cities situated along this road. It stretches over 3 kilometers and is located in the center of the highway between the southern cities of Sidon and Tyre. The IDB prepared two draft Istisna'a and Wakala agreements to finance the project. The CDR is currently waiting for the issuance of the final drafts of the agreements. It is worth noting that if the two agreements are signed, they still need to be referred to Parliament for ratification.

The Greater Beirut Water Supply Project (Bisri Dam)

On 19/10/2014, the Islamic Development Bank (IDB) has agreed to grant a US\$ 128 million loan to finance the Greater Beirut Water Supply Project (Bisri Dam). The project entails the construction of Bisri Dam to supply water to Greater Beirut. The estimated cost of this project is US\$ 617 million approximately, inclusive of the cost of real property acquisitions. The project will be co-funded by the World Bank and the Islamic Development Bank. The World Bank will commit US\$ 474 million to this project and the Lebanese government will commit US\$ 15 million. In January 2015, the CDR signed the financing agreement entailing the World Bank's contribution. The IDB prepared two draft Istisna'a and Wakala agreements to secure its contribution. The CDR is currently waiting for the issuance of the final drafts of the agree-

ments. It is worth noting that if the two agreements are signed, they still need to be referred to Parliament for ratification.

3- Completion of Al Ghadir Water Water Treatment Plant

On 22/6/2014, the Islamic Development Bank (IDB) has agreed to finance the Al Ghadir Waste Water Treatment Plant Project. The project is co-funded by the European Investment Bank and the Islamic Development Bank. The total cost of the project is estimated at US\$ 183.1 million, of which US\$ 87.5 million are secured by the IDB (47,8%) and US\$ 85.6 million by the EIB, while the Lebanese government contribution amounts to US\$ 10 million.

4- Jabal Amel Water Project – Phase III (approved by the IDB in the beginning of 2015).

On 8/03/2015, the Islamic Development Bank (IDB) has agreed to grant a US\$ 60.97 million loan to finance the Jabal Amel Water Project (Phase III). The project aims at supplying drinking water to villages and towns in Jabal Amel, through the construction of pumping stations and water networks.

The Arab Fund for Economic and Social Development (AFESD)

On 11/05/2014, two agreements were signed with the Arab Fund for Economic and Social Development (AFESD):

a. An agreement worth KD 30 million (approximately US\$ 105 million), to co-finance the completion of wastewater infrastructure in the Lebanese regions.

b. An agreement worth KD 34 million (approximately US\$ 119 million) to finance the Housing Project through the Housing Bank.

Also, the CDR and the AFESD signed a Letter of Understanding pursuing to which the AFESD committed US\$ 10 million to co-finance projects and programs to aid Syrian refugees and their host communities in Lebanon.

The Kuwait Fund for Arab Economic Development (KFAED)

On 12/06/2014, the CDR and the KFAED signed a preliminary agreement to co-finance the Tripoli Slaughterhouse Project for KD 5,5 million (approximately US\$ 19 million).

On 26/06/2014, the CDR and the KFAED signed a KD 6 million (approximately US\$ 21 million) loan agreement to finance Zahle Water Project. Also in 2014, the government of Kuwait, through the KFAED, approved a US\$ 27 million grant to contribute to the support of the communities hosting Syrian refugees. The agreement has been approved and signed on 15/01/2015. The Agence Française de Développement (AFD)

The aggregate value of the AFD development contributions amount to EUR 192 million, in the form of financing agreements signed with the CDR, with 70% focusing on drinking water and wastewater, 17% focusing on preservation of cultural and urban heritage, 11% focusing on education and higher education, and 2% focusing on technical support and assistance services.

The EUR 70 million loan agreement signed on 12/10/2012 with the AFD to finance the Keserwan Waster Water Project was concluded on 15/04/2014. The EUR 21 million loan agreement signed on 15/11/2011 with the AFD, was concluded on 23/05/2014, to finance the second phase of the Cultural Heritage and Urban Development program (CHUD) in the historical cities of Tripoli and Tyre.

On 16/12/2014, the CDR and the AFD signed a EUR 21 million loan agreement concurrently with a EUR 0.7 million grant agreement to finance the construction and equipping of the National Institute of Arts and Professions in Lebanon and to support the Institute's capacity



building program.

A EUR 45 million draft loan agreement coupled with a EUR 1.5 million grant agreement are under preparation, to finance works, studies and supervision of infrastructure construction in the education sector and the provision of schools equipment; to finance a program aimed at providing technical assistance, trainings and equipment to the Educational Research Center of the Ministry of Education and to provide technical assistance to the master plan of the Ministry of Education.

A EUR 30 million soft loan agreement is scheduled to be signed to finance private sector loans in the field of energy efficiency and renewable energy, in addition to the loan agreement signed in this regard with the European Investment Bank on 21/12/2012.

The Government of Germany / German Development Bank KfW

During 2014, the financing procedures of Phases II and III of the Jeita Spring Protection Project have been completed.

1-Jeita Spring Protection Project – Phase II: a EUR 7 million loan.

The financial cooperation agreement signed on 14/09/2010 was concluded on 17/08/2011.

The loan agreement was signed on 23/11/2011 and promulgated by Law No. 5 on 03/11/2014. The loan agreement was concluded by Decree No. 1036 on 20/11/2014 and became legally effective on 18/12/2014.

2-Jeita Spring Protection Project – Phase III: a EUR 7 million loan.

The financial cooperation agreement was signed on 11/06/2014 and promulgated by Law No.8 of 03/11/2014.

The financial cooperation agreement was concluded by Decree No. 1033 of 20/11/2014.

The loan agreement was signed

on 27/11/2014.

European Union Commission (EUC)

Financial assistance agreements signed during 2014:

During 2014, five grant agreements of a total value of EUR 45 million were signed with the EU, distributed on financial assistance programs as follows:

1.Bilateral agreements planned in 2011-2013 program;

- Grant allocated for the Office of the Minister of State for Administrative Reform (OMSAR), to finance the Social Cohesion Program in Lebanon (EUR 10 million).

- Grant allocated for the Ministry of Defense/Lebanese Army, to finance the improvement of security and social cohesion and to reinforce stability (EUR 8 million).

2.The additional program to support the Partnership, Reform and Inclusive Growth (SPRING) Project in Lebanon (for the year 2013).

- Grant to finance the Solid Waste Management Project (EUR 14 million) executed by Office of the Minister of State for Administrative Reform (OMSAR).

- Grant to finance the Economic Development project through the creation of job opportunities and income generation activities (EUR 7 million) executed by The Economic and Social Development Fund through the CDR.

3.The Neighborhood Investment Facility (NIF)

- A EUR 6 million grant to co-finance an additional funding for the Keserwan Waste Water Project, in addition to a loan contribution from the AFD and the EIB, of a total value of EUR 146 million.

In addition, the Single Support Framework (SSF) program for Lebanon for the period 2014-2016 was signed. This Program was formulated in an MOU signed on 14/10/2014 between

the

European Commission and the Government of Lebanon (represented by the Ministry of Economy), to reflect the points that have been agreed upon with regard to sectors targeted by the European Aids, following consultation with all stakeholders. This program complements the European aids that were implemented through the previous programs. The main sectors of intervention are the Justice and Security System Reform, reinforcement of social cohesion, promotion of sustainable economic development and protection of vulnerable groups and Promotion of sustainable and transparent management of energy and natural resources. An estimative budget ranging between EUR 130 million and 150 million was allocated for the 2014-2016 period, to execute the related projects according to an adequate implementation mechanism.

1.Promotion of Social Cohesion

The EUR 10 million grant agreement to finance the Promotion of Social Cohesion in Lebanon Project was signed on 19/05/2014, upon Council of Ministers Decree No.5 of 02/05/2014.

Through this project, the European Union contributes to the promotion of social cohesion in Lebanon through activities aimed at improving the quality and quantity of social and economic data issued by the Central Administration of Statistics, while at the same time improving the quality and expanding the coverage of the services of the National Social Security Fund. The project is partly implemented by the Office of the Minister of State for Administra-



tive Reform (OMSAR) in partnership with a supervisory steering committee.

1.Supporting the Security Sector in Lebanon to enhance stability and national cohesion:

A EUR 8 million grant agreement to finance the Promotion of Social Cohesion in Lebanon Project was signed on 19/05/2014, upon Council of Ministers Decree No.5 of 02/05/2014.

The purpose of the project is to support the Lebanese Government in making necessary reforms to promote stability in Lebanon. The project is implemented by EUC through contracts/services/grants/procurements conducted by the EUC on behalf of the beneficiary. The stakeholders participate through representative committees (Ministry of Interior and Ministry of Defense) and the security bodies (General Security, Lebanese Army).

2.Improving Solid Waste Management Capacities in the Bekaa and Akkar

A EUR 14 million grant agreement was signed on 17/09/2014, to finance the project aimed at improving solid waste management in the Bekaa and Akkar, upon the Council of Ministers' decree No.33 of 28/08/2014. The Decree governing the conclusion of this agreement was published in the Official Gazette No.43 on 16/10/2014.

The project aims at providing basic services related to solid waste management in the Bekaa and Akkar and to alleviate the repercussions of the Syrian crisis on Lebanon. The Project's target areas are Baalback, Zahle, Jib Jannin (Bekaa), and Srar (Akkar).

The Office of the Minister of State for Administrative Reform (OMSAR) is the executive agency (contractual authority).

3.Recovery of Local Economies in Lebanon

A EUR 7 million grant agreement to finance the Recovery of Local Economies project, was signed on 19/12/2014, under the Council of Ministers Resolution No. 44 dated 12/18/2014. Also, the agreement was concluded by decree No. 1333 of 01/15/2015. The project aims to support the local communities affected by the influx of displaced Syrians by improving the productivity of the agro-industrial sector chains and the agricultural infrastructure.

The project is implemented through the Social Development Fund / Council for Development and Reconstruction, in the framework of a program that identifies the yearly planned activities in line with the mechanism adopted by the Social Development Fund.

4.Waste Water Treatment in Keserwan area

The Euro 6 million grant agreement for the implementation of Waste Water Treatment in Keserwan was signed on 24/12/2014 under the Council of Ministers Resolution No. 35 of 29/01/2015.

The project is implemented through the neighborhood and Investment Facility (NIF), a European mechanism contributing to investment projects.

The costs of the project are also co-financed by the European Investment Bank (EUR 70 million) and by a loan from the Agence Francaise de Developpement (EUR 70 million), for an aggregate value of EUR 146 million.

The CDR is the implementing partner, in coordination with the

concerned authorities.

Financial assistance agreements pipeline for 2015

1-National Stability Support (EUR 12 million).

2-Protection and Sustainable Development of Maritime Resources in Lebanon (EUR 19 million).

3-Upgrading Solid Waste Management Capacities in Lebanon – SWAM 2 (EUR 21 million).

United Nations Development Program in Lebanon (UNDP)

In 2014, the CDR signed a number of projects, funded by grants from the United Nations agencies and other donors and implemented by the UNDP, of a total value of EUR 23 million (partly funded by the Government of Lebanon (EUR 13 million) and by other donors (EUR 10 million).

Break down of the UNDP main sectors of intervention:

-Institutional Assistance for Economic Policy and Trade - Phase III, project funded by the Ministry of Economy, of a value of US\$ 3,616,507 (Council of Ministers Resolution No. 267 of 25/4/2014).

- Technical Assistance for Fiscal Management and Reform Project, funded by the Ministry of Finance, of a value of US\$ 7,818,552 (Council of Ministers Resolution No. 1198 of 04/10/2014).

- Transfer of expertise through Lebanese expatriates Project- Phase III, funded by the Council for Development and Reconstruction, of a value of US\$ 105,000,000.

- Sustaining and Enhancing the Institutional Capacity of IDAL, project funded by IDAL, worth US\$ 1,222,544.

- International Awareness Campaign on Lebanese Host Communities Project, financed by the Lebanese Recovery Fund (LRF) worth US\$ 121,017,000.



- Small Decentralized Renewable Energy Power Generation Project, funded by the United Nations Environment Program (US\$ 1,450,000) and the United Nations Development Programme (US\$ 125,000,000).
- Country energy efficiency and renewable energy demonstration project for the recovery of Lebanon Phase 4 - CEDRO IV, funded by the European Union (US\$ 3,900,000).
- Machrek Energy Development Project - MED Solar, funded by Trama Techno Ambiental worth EUR 892,647,000.
- Support to the Lebanon Environmental Pollution Abatement Project - LEPAP, funded by the Italian government worth US\$ 1,885,000 million.
- Support to Host Communities

in North Lebanon in the WASH Sector, funded by the Swiss Development Cooperation worth US\$ 826,901.000.

-Selected rapid delivery project and immediate impact interventions - access to sustainable energy for lighting and heating for host communities, funded by the Fund for the Lebanese Recovery Fund (LRF) (US\$ 1,423,254).

-Supporting Lebanese communities promoting stabilization project and social cohesion in Lebanon - Access to renewable energy applications in Akkar, funded by UNHCR (US\$85,185,00).

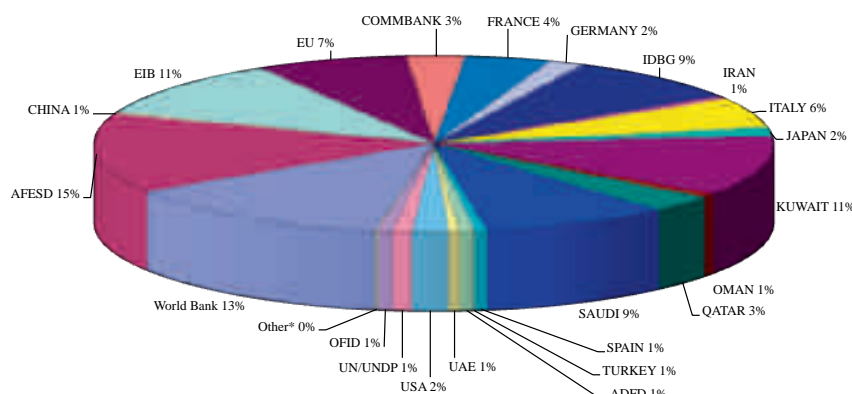
-People's Republic of China: The Council of Ministers approved a grant offered by the People's Republic of China to the Lebanese Government

amounting to 50 million Chinese Yuan to support economic and technical cooperation projects. The grant approval decree No. 11880 was issued on 22/5/2014.

People's Republic of China Grant

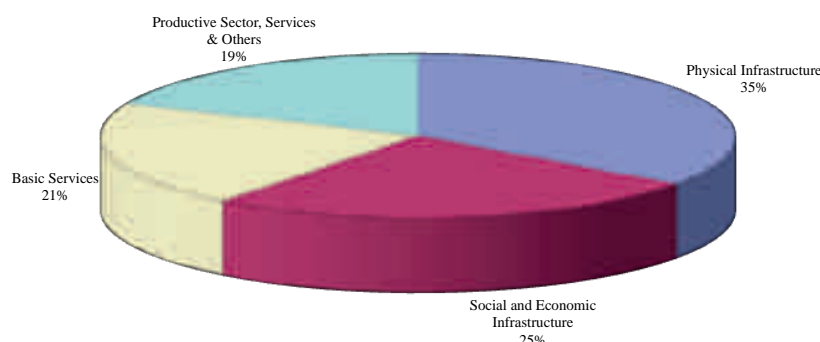
The Council of Ministers approved a zero interest grant agreement of 50 million Chinese Yuan from the People's Republic of China to support the economic and technical cooperation projects. The agreement was signed on 18/8/2014. The targeted projects will be identified at a later stage. The loan can be repaid in the form of Lebanese exports.

Chart 1
Percentage Share of Loans & Grants
Ratified Signed & Approved Foreign Financing
Distribution by Fund



* Other Funds financing less than USD 10 Millions in Loan & Grants are the following : AGFUND, ARAB LEAGUE, ARGENTINA, BELGIUM, GREECE, IRELAND, KOREA, METAP, NETHERLANDS, SWEDEN, GEF, HRC and Private Donors.

Chart 2
Percentage Share of Loans & Grants
Ratified Signed & Approved Foreign Financing
Distribution by Sector



Grants

Ratified Signed and Approved
Distribution by Sector and Funding Source
(In Millions of USD - Starting 1992 Until 31/12/2014)

Sector/Funding Source*	World Bank (IDA, IBRD, LSCIF)	AFESD	CHINA	EIB	EU	FRANCE (AFD, CRIF, French Protocols)	GER-MANY (KFW, GIZ)	IDBG	ITALY	JAPAN (JBIC/ JICA)	KUWAIT (KFAED, KUWAIT)	OMAN	QATAR	SAUDI (KSA, SFD)	SPAIN	TUR-KEY	UAE	USA (USA, USAID)	UN/ UNDP	Other*	Total
Physical Infrastructure																					
Electricity	5.00	0.34			4.05	5.45					25.89				6.62				0.05		47.40
Fixed lines (Telecom)			6.02		0.97														0.04		7.04
Public & Private Land Trans (Roads)				1.03		0.37			9.33	1.08	40.42			109.71				30.00		1.27	193.21
Air Transportation						0.54					2.39								2.35		5.28
Maritime Transportation					3.65	0.37															4.02
Multisectorial Infrastructures	10.00	20.86	20.52		31.29	4.87	4.87	0.25	5.17		9.75			60.00						0.73	163.43
Sub Total	15.00	21.21	26.55	1.03	39.96	6.73	4.87	0.25	14.49	1.08	78.44	0.00	0.00	169.71	6.62	0.00	0.00	30.00	2.44	2.00	420.38
Social and Economic Infrastructure																					
Public education		1.02			13.78			1.91	1.43	0.52	16.41			29.03					0.96	6.25	71.31
Vocational & Tech. Education			1.21		0.11	0.38	18.53		0.12	0.94	4.00	10.00							0.03		35.31
Culture & Higher Education	0.03	0.61	1.21		3.65	2.74		1.93	1.93		0.06	1.79	25.00	6.58					2.43		46.05
Youth & Sports					0.85				0.04		21.23			10.44							32.56
Land use & Environment			0.50		11.15		11.80		13.42			7.00					50.00	0.13	13.91	0.22	108.13
Housing					1.55						135.00	40.00	211.14	325.00					5.31		718.00
Health	0.80		4.23		1.22	0.96			22.68		46.76			44.13		20.00			1.95	4.56	147.28
Social & Economic Development	8.70	10.37	1.89		88.08				109.23		11.59				46.35			87.00	4.32		367.54
Sub Total	9.53	12.01	9.03	0.00	120.38	4.09	30.33	1.91	148.86	1.46	235.04	58.79	236.14	415.17	46.35	20.00	50.00	87.13	28.91	11.04	1526.18
Basic Services																					
Solid waste					19.79				3.04	0.23				22.24							45.31
Water Supply	15.00			7.91	7.16		25.51		13.99	0.96	51.15			16.53				20.00			158.21
Waste Water				3.46	48.89	0.23	25.70	0.17	0.19	0.61	18.65								0.01		97.92
Sub Total	15.00	0.00	0.00	11.37	75.85	0.23	51.21	0.17	17.22	1.80	69.80	0.00	0.00	38.77	0.00	0.00	0.00	20.00	0.01	0.00	301.44
Productive Sector, Services & Others																					
Agriculture					36.97	1.87	0.22		8.06	0.28	3.17							15.00	19.53		85.12
Irrigation		1.00			0.19				1.31	0.37	0.30								0.60		3.78
Industry					12.27	0.86	0.31												1.08		14.52
Tourism		1.20				0.62			3.22	0.30	41.73								0.37	2.39	49.84
Private Sector Services	15.00				117.48	0.15			0.12										0.38		133.14
Management and Implementation	1.39	4.74			277.34	6.58	8.11	5.04	10.36	1.20	1.02	13.50							13.44	0.36	343.08
Public information		0.17	0.18																		0.35
Fuel						0.27															0.27
Administration	30.48	0.31	3.03		51.55				4.63	0.56	15.73		91.00	35.76			5.00		0.84		238.88
Miscellaneous					25.34	0.85			1.97		0.69			10.80				23.00			62.65
Sub Total	46.87	7.41	3.21	0.00	520.96	11.40	8.64	5.04	29.69	2.72	62.65	13.50	91.00	46.56	0.00	0.00	5.00	38.00	36.25	2.75	931.64
Total	86.40	40.63	38.79	12.40	757.14	22.44	95.05	7.37	210.27	7.06	445.93	72.29	327.14	670.21	52.98	20.00	55.00	175.13	67.62	15.79	3,179.63

* Other Funding Sources contributing with less than 5 Millions in Grants are : AGFUND, ARABLEAGUE, ARGENTINA, BELGIUM, GREECE, IRELAND, KOREA, METAP, NETHERLAND, SWEDEN, GEF, OFID, HRC and Private Donors.

Loans and Grants Ratified Signed and Approved Distribution by Sector and Funding Source (In Millions of USD - Starting 1992 Until 31/12/2014)																										
Sector/Funding Source*	World Bank (IDA, IBRD)	AFESD	CHINA	EIB	EU	COM-MERCIAL BANKS	FRANCE (AFD, French Protocols, CRIF)	GERMANY (KFW, GIZ)	IDBG (ICD, IDA, ITFC)	IRAN	ITALY	JAPAN (JICA, JBIC)	KUWAIT (KFAED, KUWAIT)	OMAN	QATAR	SAUDI (KSA, SFD)	SPAIN	TURKEY	ADFD	UAE	USA (USAID, USA)	UN/ UNDP/ IFAD	OFID	Others*	Total	
Physical Infrastructure																										
Electricity	109.73	432.81		134.93	4.05	291.89	30.94	40.31	131.47	21.90	258.04		170.36				6.62					0.05				1,633.09
Fixed lines (Telecom)	12.70		6.02		0.97		1.25		7.82				37.30									0.04				66.12
Public & Private Land Trans (Roads)	175.88	193.65		188.63			0.37		181.21		9.33	1.08	189.35			248.20			10.00		30.00		35.00	1.27		1,263.95
Air Transportation				84.47			22.25						53.62									2.35				162.68
Maritime Transportation				107.91	3.65	0.35	2.96																			114.88
Multisectorial Infrastructures	10.00	98.39	26.56	85.16	31.29		4.87	4.87	96.19		5.17		9.75			60.00										428.09
Sub Total	308.31	724.85	32.58	601.10	39.96	292.24	57.78	45.17	416.68	21.90	272.53	1.08	460.37	0.00	0.00	308.20	6.62	0.00	10.00	0.00	30.00	2.44	35.00	2.00		3,668.81
Social and Economic Infrastructure																										
Public education	84.01	22.01			20.00		0.46		34.88		1.43	0.52	94.62			45.11						0.96			6.25	310.25
Vocational & Tech. Education	59.54	51.23	1.21		0.11		3.70	18.53	30.46		0.12	0.94	4.00	10.00							0.03		4.00			183.86
Culture & Higher Education	0.03	100.39	1.21		3.65		33.02		129.92		14.38		0.06	1.79	25.00	36.04						2.43				347.92
Youth & Sports					0.85						0.04		21.23			10.44										32.56
Land use & Environment	26.93		0.50		11.15		25.55	11.80			13.42			7.00						50.00	0.13	13.91			0.22	160.61
Housing	13.27	142.65			1.55								135.00	40.00	211.14	325.00			25.00			5.31				898.92
Health	36.22		4.23		1.22		6.25		107.84		22.68		46.76			91.26			20.00			1.95	15.11	4.56		358.06
Social & Economic Development	28.70	10.37	1.89		88.08						109.23		11.59				46.35					4.32				387.53
Sub Total	248.71	326.65	9.03	0.00	126.59	0.00	68.97	30.33	303.10	0.00	161.30	1.46	313.25	58.79	236.14	507.84	46.35	20.00	25.00	50.00	87.13	28.91	19.11	11.04		2,679.71
Basic Services																										
Solid waste	31.92				19.79						3.04	0.23				22.24										77.23
Water Supply	345.37	64.05		86.27	7.16		68.15	32.81	67.71	11.94	26.91	89.13	193.92			50.98			10.00		20.00		5.00			1,079.41
Waste Water	10.33	148.22		255.74	48.89		174.64	62.47	97.49	5.97	92.29	53.95	64.75						17.50			0.01				1,032.26
Sub Total	387.62	212.27	0.00	342.01	75.85	0.00	242.79	95.28	165.21	17.92	122.24	143.31	258.67	0.00	0.00	73.22	0.00	0.00	27.50	0.00	20.00	0.01	5.00	0.00		2,188.90
Productive Sector, Services & Others																										
Agriculture	21.51		5.55		36.97		3.54	0.22			8.06	0.28	3.17								21.00	42.41	13.40			156.13
Irrigation	56.71	106.87					0.19				1.31	0.37	68.61									4.60				238.67
Industry				39.73	12.27	0.89	1.81	0.31														1.08				56.10
Tourism	31.50	1.20		37.12			16.52				3.22	0.30	41.73									0.37		2.39		134.36
Private Sector Services	60.00	85.38		84.30	117.48		0.15				0.12											0.38				347.82
Management and Implementation	106.64	35.47			277.34		6.58	8.11	5.04		10.36	15.87	1.02	13.50								13.44		0.36		493.74
Public information		0.17	0.18				27.73																			28.09
Fuel							0.27		25.00																	25.27
Administration	156.89	21.17	3.51		51.55						4.63	0.56	15.73		91.00	42.08				5.00		0.84				392.96
Police																										23.00
Miscellaneous		10.25			25.34		0.85			14.93	1.97		0.69			10.80										64.83
Sub Total	433.27	260.51	9.25	161.15	520.96	0.89	57.65	8.64	30.04	14.93	29.69	17.39	130.95	13.50	91.00	52.88	0.00	0.00	0.00	5.00	44.00	63.13	13.40	2.75		1,960.97
Total	1,377.90	1,524.28	50.86	1,104.26	763.35	293.13	427.20	179.42	915.04	54.74	585.77	163.24	1,163.25	72.29	327.14	942.14	52.98	20.00	62.50	55.00	181.13	94.50	72.51	15.79		10,498.40
Other Funds financing less than USD 10 Millions in Loan & Grants are the following : AGFUND, ARAB LEAGUE, ARGENTINA, BELGIUM, GREECE, IRELAND, KOREA, METAP, NETHERLANDS, SWEDEN, GER, HRC and Private Donors.																										

* Other Funds financing less than USD 10 Millions in Loans & Grants are the following: AGFUND, ABAB LEAGUE, ARGENTINA, BELGIUM, GREECE, IRELAND, KOREA, METAF, NETHERLANDS, SWEDEN, GEF HRC and Private Donors.

FUND	Acronym
Abu-Dhabi Fund for Development	ADFD
Agence Française de Développement	AFD
Arab Fund for Economic & Social Development	AFESD
The Arab Gulf Program for United Nations Development Organizations	AGFUND
League of Arab States	ARAB LEAGUE
Argentina	ARGENTINA
Le Gouvernement Du Royaume de Belgique	BELGIUM
People's Republic of China	CHINA
Various Commercial Banks	Comm. Banks
Conseil Regional d'Ile de France	CRIF
European Investment Bank	EIB
European Union	EU
Republic of France, (AFD), French Protocols, CRIF	FRANCE
Global Environment Fund	GEF
Republic of Germany	GERMANY
Deutsche Gesellschaft fur Technische Zusammenarbeit	GTZ
High Relief Commission (Lebanon)	HRC
International Bank for Reconstruction & Development (The World Bank)	IBRD
Islamic Corporation for the Development of the Private Sector (IDBG member)	ICD
Islamic Development Bank (IDBG member)	IDB
Islamic Development Bank Group	IDBG
International Fund for Agricultural Development	IFAD
Islamic Republic of Iran	IRAN
The Republic of Ireland	IRELAND
Republic of Italy	ITALY
International Islamic Trade Finance Corporation (IDBG member)	ITFC
Japan	JAPAN
Japan International Cooperation Agency (previously known as JBIC)	JICA
Kuwait Fund for Arab Economic Development	KFAED
Kreditanstalt fur Wiederaufbau	KFW
State of Kuwait	KUWAIT
Mediterranean Environmental technical Assistance Program	METAP
The Netherlands	NETHERLANDS
OPEC Fund for International Development	OFID
Sultanate of Oman	OMAN
State of Qatar	QATAR
Kingdom of Saudi Arabia	SAUDI
Saudi Fund for Development	SFD
Kingdom of Spain	SPAIN
Swedish International Development Cooperation Agency (ASDI)	SWEDEN
Republic of Turkey	TURKEY
The United Arab Emirates	UAE
United Nations Secretariat (including country pledges) + Agencies	UN/UNDP
United States of America	USA
US Agency for International Development	USAID
Hellenic Republic of Greece	GREECE



