AGRICULTURE AND IRRIGATION

•Current situation of the agricultural sector

Agriculture in Lebanon relies on individual initiatives, under a liberal and open economic system. This sector and has witnessed major changes during the past three decades, namely:

-An increase of 36% in the number of farm holders working in agriculture to 195 thousand agricultural investors;

-An increase of 155% of the size of irrigated to 142 thousand hectares out of 277 thousand hectares of cultivated lands;

-Fragmentation of agricultural lands, whereby the size of 75% of agricultural areas do not exceed 1 hectare and represent only 20% of the total cultivated area.

The agricultural sector, though contributing only to 6.3% of the GDP, represents 17% of the value of exports, and constitutes either the sole source of income or an additional source of income for a large portion of the Lebanese rural population.

85% of available water supplies are consumed by the agricultural sector. This high water demand puts additional stress on irrigated farming, leading to an increase in the number of abandoned lands due to the lack of water or to a decline in investment opportunities and agricultural profits for smallholders.

The Lebanese agricultural production is characterized by high production costs and limited competitiveness, with a longstanding openness to global markets strengthened by trade agreements.



Nevertheless, Lebanon's geographical location and its climate and crop diversification remain a major strength if only the country can seize available opportunities, make rational use of its natural resources, namely water, overcome the obstacles limiting 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) a local market for fresh produce, (2) a market for products intended for processing, (3) a market for fresh agricultural products and processed products intended for export.

The 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.

Another disadvantageous aspect of the agricultural sector is the absence of the government's active role in keeping abreast of technical breakthroughs in agricultural research, training and extension, and using a participatory approach to secure the ownership and commitment of the different administrations involved in the agricultural sector. Similarly, the agricultural technical and marketing information is insufficient, despite some achievements made within the framework of the "Assistance to Agricultural Census" project, and the support provided by IDAL to regulate the production intended for export under "Export Plus", a national agricultural export support program.

In the upcoming years the growing water demand will require (1) securing additional water sources by building dams, lakes and facilities for water storage, (2) rehabilitating and upgrading surface water and groundwater facilities, and (3) regulating water use in order to make it more efficient, coupled with an adequate legislative framework.

The burden of the Israeli July 2006 war fell on all sectors of the Lebanese economy and the agricultural sector was one of the hardest-hit, because it was already facing difficulties marketing its produce. This additional stress resulted in heavy losses that exhausted agricultural laborers and exacerbated the Lebanese farmers' frustration. To face all these challenges, it was

CDR OCTOBER 2016

imperative to assess damages, put a quick contingency plan in place and secure the necessary funding for it, simultaneously with the initial plan designed for this sector.

•A Vision for the Future

To address the growing water needs in the future, an integrated development strategy will have to be implemented to use the available water resources more efficiently and sustainability by rehabilitating the existing water facilities, finding additional water sources including the construction of dams and lakes, rationalizing water use, and applying good water management, maintenance and operation techniques.

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 agricultural products that have an added value and are processed 2) ensuring continuous market supply of quality products in sufficient quantities and on time, and 3) considering the development of investable farming units.

Due to the fact that technical, statistical and marketing data play a pivotal role in agricultural development, it is expected that management facilities and professional organizations will attach a great importance to the creation of an information system that allows all actors involved in the agriculture sector, farmers in particular, to obtain the information they need in a timely fashion.

In the future the Lebanese government will have to develop strategies and action plans, coupled with a supportive regulatory and legislative framework, and to create an efficient monitoring and evaluation mechanism in consultation with the private sector stakeholders. In this context. the 2010-2014 strategy of the Ministry of Agriculture focused on the main sectors with high growth potential (such as olives, grapes, certified seeds, flowers, organic farming and fishing industry), and on projects aimed at modernizing production and exports chains. The strategy also placed an emphasis on the upgrading of laws that regulate the exploitation of agricultural lands, the laws on quality assurance and quality control, as well as the laws regulating the activities of agricultural and marketing companies, with due regard to the importance of agricultural extension at all levels and across all agricultural areas, in coordination with local authorities.

On another note, rural development has become of increasing importance in balanced development, and is centered on integrated anti-poverty programs that take into consideration the particularities of rural areas, target social sectors development. provide minimum living standards and create job opportunities. All these factors combined necessitate a) an integrated comprehensive plan that works towards the preservation of the environment and the natural resources in synergy with the stakeholders engaged in this field, and b) a collaborative and participatory approach with local civil communities.

2- Main achievements until 2015 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 intended to support agricultural planning. As a result, the key elements and the master plan of the agricultural policy were set out, in coordination with the "Assistance to the Agricultural Census" project implemented by the CDR under a contract signed with the FAO and partially funded by a World Bank loan. The project led to the creation of the agricultural strategy and a five-year agenda for the Ministry of Agriculture (2005-2009).

As for 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), Yammouneh (4500 ha), Danniyeh (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 and the Litani River Authority, and to provide vehicles, equipment, instruments, advisory contracts, training and 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 the South of Lebanon to be used in irrigation and drinking water supply– Phase I., was completed.

In addition to the above, the CDR contributed to securing foreign funds to implement the Agricultural Infrastructure Rehabilitation project as part of the Green Plan/Ministry of Agriculture, which includes land reclamation, construction and rehabilitation of agricultural roads and retaining walls. The CDR also allocated funds from its annual budget to the project on the Rehabilitation of Livestock Production for smallholders in the Bekaa.

The CDR also participated, through coordination committees, in the implementation of several projects, among which the Agricultural Support Project falling under the Italian/Lebanese Protocol (1997) and (1998-2000) signed with the CDR, of which a part was allocated to the Baalback- Hermel Agricultural Development Project and to the Certified Plant Production project.

The CDR also followed up on several projects including the Lebanon Olive Oil Project in marginalized areas implemented with the assistance of the Mediterranean Agronomic Institute of Bari, through a grant allocated by the Italian government.

Moreover, a loan from the International Fund for Agricultural Development (IFAD) financed the implementation of projects aiming at building the capacities of the Ministry of Agriculture and its affiliated institutions (the Green Plan and the Agricultural Research Center). In this regard contracts were signed a) to procure the vehicles and neces-



sary equipment and instruments needed by the said projects, b) to rehabilitate agricultural extension centers in Sour and Abdeh, and c) to rehabilitate and equip the laboratories and greenhouses of the research institutes of Sour, Fanar and Tal Amara. Also technical assistance, studies, training and maintenance necessary for these institutions were provided through advisory services contracts.

Also through the IFAD loan, agricultural extension services were provided across all areas of irrigated farming, through advisory contracts signed 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-Danniveh Caza) 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.

In 2012, the construction of an irrigation line in Khiam was completed, in addition to the construction of a rainwater drainage network in Nabatiyeh, rehabilitation of a water pond in BintJbeil (Nabatiyeh District), and construction of agricultural roads in Aarkoub, Yohmor and Taibeh (Nabatiyeh District). The CDR had initiated these works in 2010 under an EU grant (Grant ENP/2007/018-882).

Furthermore, the CDR continued to provide oversight over the implementation of the Water Development Project in Marjeyoun that has been officially launched in mid May 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 socioeconomic 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 Authority and the Association of Friends of Ibrahim Abed Al Aal (AFIAL).

Regarding the Canal 800 Project aiming 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 theLahmeverInt. GmbH/JBJ 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 Authority to provide oversight of the project that has commenced in 2007.

•Moreover, the CDR has initiated

CDR OCTOBER 2016

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 operates from a 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 constantly interact 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 Cazas 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 targeted 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 various areas covered by the project.

In 2014, the CDR started supervising the execution works in different areas covered by the project. The CDR also initiated infrastructure works composed of six project groups to repair agricultural roads, as well as the repair and renovation of irrigation channels and the construction of water collection lakes.

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.



Proposed Project			
- Creation of waste treatment plant			
- Equipping of medical center			
- Rehabilitation of irrigation canals			
- Equipping of vocational training center			
- Socio-cultural municipal complex			
- Rehabilitation of irrigation canals			
- Purchase of waste containers and waste collection vehicles			
- Installation of an integrated system for waste water treatment			
- Equipping and improvement of the services of Makassed Health Center			
- Equipping Schools and improvement of vocational and school education			
- 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			
- Digging wells, rehabilitation of networks and drinking water storage			
- Support agricultural cooperatives			
- Digging wells, rehabilitation of networks and drinking water storage			

In 2014, the CDR continued to implement the nine socio-economic development projects under the supervision of ESFD in nine clusters distributed on the project targeted areas and summarized as follow:

The environment component of the ADELNORD Project:

In the context of setting out the requirements (terms of reference) related to the development of a Sustainable Strategic Plan for the Cazas of Akkar, Hermel and Danniyeh, 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.

In 2014, ADELNORD started to put in place the Strategic Sustainable Regional Development Plan for Akkar, in cooperation with a team of subject matter



experts in environmental sciences, economics, urban planning and social development. The experts were assigned by the technical assistance (GFA – ELARD) according to the above mentioned terms of reference. In this context, the Diagnostic mission and the draft plan were completed in cooperation with local authorities.

And as part of the technical assistance provided for the establishment of a national park in the mountainous areas of ADELNORD Akkar, project agreed with the Ministry of Environment to set forth the requirements to award a technical study on the establishment and management of regulated natural reserves in Lebanon as a preparatory step for the establishment of a national park in Akkar. In 2012, as part of AD-ENLNORD'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.

In 2013, the Ministry of Environment approved the above mentioned draft law on natural reserves prepared by the CDR and was ratified by the concerned parliamentary committees. Moreover, in 2014 the CDR completed the preparation of the draft decree on natural reserves which have been presented to the Ministry of Environment.

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 Andkit-Akkar and Safira-Danniyeh, that would culminate 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 Andkit-Akkar

and Safira-Danniyeh, awaiting the approval of the Ministry of Agriculture.

Upon the request of the Ministry of Agriculture, the CDR initiated the Phase II of the mission, which includes:

-Implementation of a training program for forests guards and local activists.

-Procurement of private forest management equipment and accessories.

- Suggestion of a followup and monitoring mechanism for the implementation of two management plans for the forests of Andkit-Akkar and Safira-Danniyeh.

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.

The CDR also allocated US\$ 8.4 million of the OPEC loan to the "Green Plan" 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 this context:

-In 2014, the CDR signed a Memorandum of Understanding with the "Green Plan" regarding the implementation mechanism and the disbursement from the OPEC Fund for International Development (OFID) number 1337PB determined for the implementation of this project.

-Agreement was reached to identify the location of 20 hill lakes expected to be implemented within the project and is distributed as follow: Bouday, Younin, Amiri al Moudwi, Barka, Al Zarazir, Ain Al Biniyeh, Nahle (Bekaa), Ayta Al Shaeb, Aytaroun, BaytLif, Chibaa, Kfarchouba, MajdelSelem (Nabatiyeh), Ehmej, Baadran, Kfarmata, Kornayel, Mechmech (Mount Lebanon), Karam Al Moher (North), and Mounjez (Akkar).

- Execution and supervision works were awarded for 8 hilllakes: Bouday, Ain Al Biniyeh, Nahle (Bekaa), Ayta Al Shaeb, Aytaroun, BaytLif, Chibaa (Nabatiyeh), and Ehmej (Mount Lebanon).

It is worth noting that 160 contracts were signed in the agriculture sector between 1992 and the end of 2015, of which 134 were completed and 26 are current active projects, with a total value of US\$ 45, 96 million.

3- Work Progress in 2015

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 through the initiative of the "Social Development Fund", funded by 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", the CDR continued to provide the necessary funds to complete the 8 hill lakes in the following regions: Bouday, Ain Al Biniyeh, Nahle (Bekaa), Ayta Al Shaeb, Aytaroun, BaytLif, Chibaa (Nabatiyeh), and Ehmej (Mount Lebanon) as well as continuing the works in collaboration with the "Green Plan". In the framework of the "Technical Assistance to the Local Development Support Project in North Lebanon" ADELNORD, funded by the European Commission and implemented by the CDR in coordination with the technical assistance staff (GFA-ELARD) and the field supervisor, as well as the Economic and Social Fund for Development (ESFD). The CDR continued during 2015 to receive the works of the infrastructure component composed of 6 groups of projects i.e rehabilitation of agricultural roads, restoration of irrigation canals and construction of water collection lakes.

As for the local development component of ADELNORD, in 2015, the nine development and social projects were delivered to the ESFD, in nine clusters of villages across the projected target area.

Concerning the environmental component of ADELNORD Project, the following was achieved in 2014:

1)The final version of the "Development of a Sustainable Strategic Plan for Akkar, Hermel and Danniyeh" was completed in coordination with a team of experts specialized in environment sciences, economics, and urban planning and social development, assigned by the technical assistance (GFA -ELARD) established for this purpose in coordination and consultation with local authorities.

2)Within the framework of Fire Suppression and Forest Protection and Management, the CDR continued to follow up on Phase II of this mission, upon the request of the Minister of Agricul-



118

ture, in particular the following: 1.Implementing a training program targeting forests guards and local activists;

2.Supplying of forest management tools and supplies; 3.Proposing a follow up mechanism to implement the two management plans of the Forest of Andkit and Safira.

The French Development Agency (AFD) showed an interest in the National Afforestation Program "40 Million Tree", a program prepared and implemented by the MoA in collaboration with different local bodies and donors, and constituting a cornerstone of the MoA's current work plan.

To that end, AFD dedicated a special delegation that elaborated an Aide Memoire to describe the current situation and identify the current related initiatives and major needs. In light of the findings of the Aide Memoire, a plan was presented to outline the scope of a term of reference aiming at preparing: -Preliminary studies (Avant-Project Sommaire (APS)) -Detailed studies (Avant Project Detaille; APD)

-Tender document (Dossiers de Consultation des Entreprises; DCE)

-Socio-environmental impact assessments (Etudes d'impact Environnemental et Social; EIES):

These studies will have to be subcontracted by the CDR in close collaboration with the Ministry of Agriculture and with the financial assistance of AFD.

Based on the above, the CDR in collaboration with the stakeholders in the Ministry of Agriculture and AFD prepared the



above-mentioned studies tender document within the framework of contributing to the National Afforestation Program "40 Million Tree" funded by the AFD, with a budget of EUR 300,000.

These services are two-phased: -Phase 1: preparation of the studies (Avant-Preliminary Project Sommaire (APS)) and the Socio-environmental impact assessments (Etudes d'impact Environmental et Social (EIES)), with a budget not exceeding EUR 150,000. -Phase 2: preparation of the Detailed studies (Avant Project Detaille (APD)) and the tender document (Dossiers de Consultation des Entreprises (DCE)), with a budget not exceeding EUR 150,000, on an optional basis for CDR. Phase 2 will kick off in the light of the findings of Phase 1.

A call for tenders to carry out this mission was released.

On a different note, the CDR prepared the draft for the Sustainable Socio-economic Development of Lebanese Coastal Communities, in close collaboration with the Ministry of Agriculture and the Italian Development Cooperation, with a view to develop the agricultural sector and the Fisheries industry in five Lebanese Coastal cities.

The CDR, through its participation in coordination committees, is following up on projects implemented by the Ministry of Agriculture:

1. The committee to address the issue of prohibited crops and propose alternative crops in the Bekaa.

2.The National Committee on the development of efficient land use policies and improvement of living standards.3.The National Committee to Combat Desertification, Climate Change, and Biodiversity.4.The coordination committee for the "Economic and Social Development Project for Olive Producers in Poor Areas".

5.National Food Security Program committee in cooperation with the Food and Agriculture Organization of the United Nations (FAO).

6.The steering committee of the Hilly Areas Sustainable Agricultural Development Project "HASAD".

7.The steering committee of the Lebanese Observatory for Agricultural Development.

8. The steering committee for the Coordination Project between the Ministry of Agriculture and Italy.

9. The steering committee of Promoting the Production and Marketing of Lebanese Agricultural Production.

10.The coordination committee for the Agricultural and Rural Development Project (ARDP) funded by the European Union. 11.The national coordination committee for the United Nations Food and Agriculture Organization (FAO).

These committees provide insights into the major results of completed projects and planned activities as well as the problems and challenges encountered.

4- Main projects under preparation for 2016:

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 previously subcontracted; 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" ADELNORD, funded by grant n^o ENPI/2008/019-623, the CDR will continue to:

-Supervise the delivery of prior-

ity local development projects in the different village clusters under the supervision to 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 regard to the endorsement of the two management plans of the forests of Andkit 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 subcontracted 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 2016, the CDR will seek to subcontract the Supervisory Control and Data Acquisition (SCADA), 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, scheduled from 2016 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.

Within the framework of contributing to the National Afforestation Program "40 Million Tree", the CDR will subcontract the mission of preparing Phase 1 of the studies (APS,APD/DCE, and EIES) funded by AFD with a total budget of EUR 300,000, in coordination with the Ministry of Agriculture stakeholders.

The CDR will work towards developing a final draft of the Sustainable Socio-Economic Development of Lebanese Coastal Communities project, in close collaboration with the Ministry of Agriculture and the Italian Development Cooperation, in order to subcontract works in the near future.

The CDR will continue to provide oversight over the work of the coordination committees in partnership with the Ministry of Agriculture, to monitor their different agricultural projects and get an insight of the main results of completed works, upcoming activities and the problems and challenges encountered.



Main projects under preparation 2016

Project	Estimated value (US\$)	Source of Funding	Expected date to resume work	Scheduled completion
Restoration of the lake of Mechmech	300, 000	CDR	June 2016	September 2016
Water transfer from Litani River to the South of Lebanon for drinking water and irrigation–(Subcontracting of the Supervisory Control and Data Acquisi- tion Contract SCADA) – under Phase I	2,242,000	- AFESD - KFAED	February 2016	February 2018
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	June 2016	July 2021





120

