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LEBANON

Washington Conf.

الجمهورية اللبنانية

مكتب وزير الدولة لشؤون التنمية الإدارية
مركز مشاريع ودراسات القطاع العام

Republic of Lebanon
Office of the Minister of State for Administrative Reform
Center for Public Sector Projects and Studies
(C.P.S.P.S.)

RECOVERING FROM THE PAST BUILDING FOR THE FUTURE

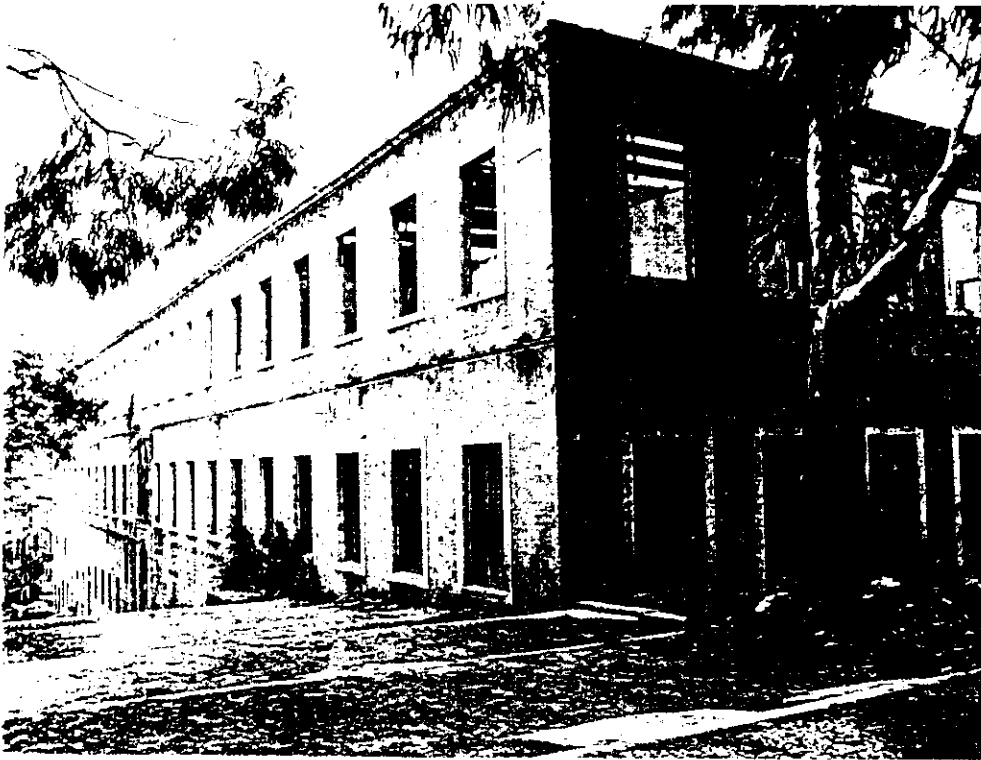


FRIENDS OF LEBANON CONFERENCE, OCTOBER 1996, WASHINGTON D.C.

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Old Justice Palace
Power Substation
Sports City



Background

The cease-fire that brought an end to the attack on Lebanon in April 1996 was largely due to the efforts of many friendly countries. The April Understanding ensures the security and safety of civilians and provides for a mechanism to monitor its implementation.

Lebanon, despite its small size, has played a major role in the evolution of the peace process, which has become an essential component of the political realities in the region and the world at large. Indeed, the peace process would not be where it is today, but for the heavy price that was borne largely by Lebanon over the years .

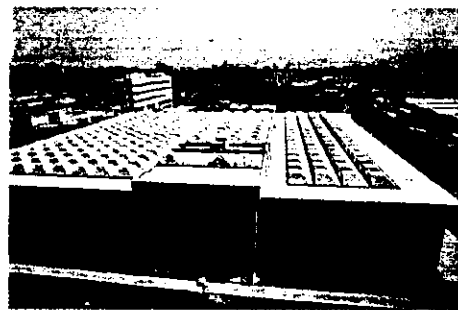
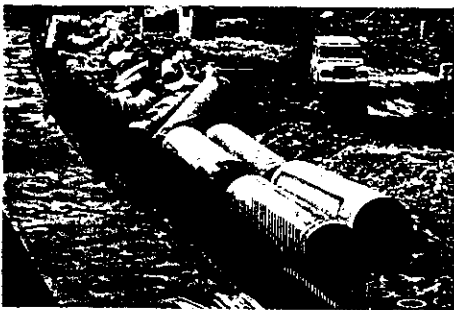
The wars that Lebanon has endured have deeply impacted the Lebanese people. Today, the Lebanese are fully convinced, that national unity and a strong and effective state are their only guarantee to a peaceful and prosperous future.

Today, after the latest Israeli attacks on Lebanon, it became obvious that there can be no military solution to the conflict. The solution can only be political and economic. This has been the position of the Lebanese Government since the first day of the attack. Indeed, the April Understanding underscored that the solution is political and emphasized the need to resume peace negotiations. Lebanon is deeply and sincerely committed to the ongoing peace process. The Lebanese have every interest in ensuring that a just, comprehensive and lasting peace takes hold in the Middle East.

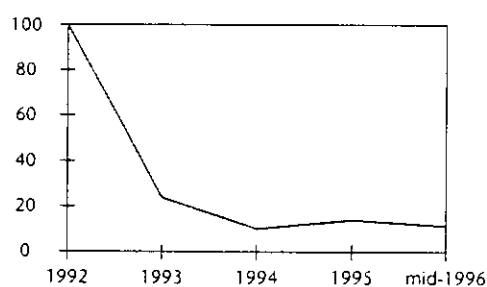
The Understanding stressed that the solution is also economic and incorporates the establishment of a framework to assist in the reconstruction of Lebanon. Seventeen years of war and regional conflict had a devastating effect on the Lebanese economy and society. The total damage to physical assets sustained during that period was estimated by the United Nations at US\$25 billion - an equivalent of more than eight times the size of Lebanon's GDP in 1990, the last year of conflict. The impact on social conditions and on human resources was equally grave and by 1990 real per capita income was only about one - third of the 1975 level.

Throughout the post-war period the Lebanese government faced the challenges of reconstruction, promotion of economic and social stability, and enhancement of security. The defense and internal security forces are being modernized and expanded while a multibillion multidimensional human resources and physical infrastructure, rehabilitation, and reconstruction program has been initiated. To date, major progress has been achieved in the implementation of phase one of this program and macroeconomic stability has been established.

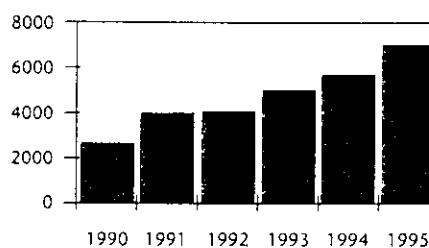
Oid Justice Palace after renovation
Nahr el Kalb sewage
Bir Hassan Technical school



Since 1992, growth, fueled by reconstruction activity, has averaged over 7% per annum. The economic recovery was supported by the Government's stabilization policy which has brought inflation down to a single digit level. With reconstruction underway and strong GDP growth, imports have risen rapidly, with capital goods representing a major share. In 1995, imports of goods and non-factor services reached US\$7.7 billion. The resulting deficit in the current account of the balance of payments has been financed primarily with private capital flows (including private transfers and portfolio investments).



Inflation (%)

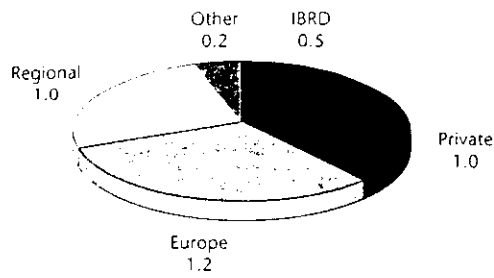


Imports (\$ million)

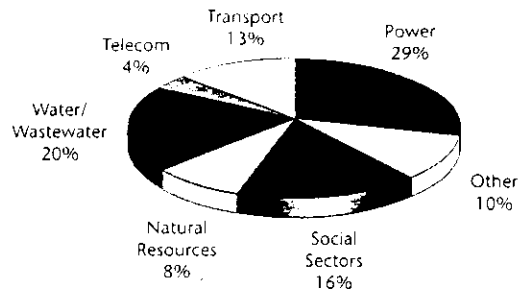
The Ongoing Reconstruction Effort

At the end of 1990, the Government revived the Council for Development and Reconstruction (CDR) and entrusted it with the task of preparing a national reconstruction strategy and implementing a National Emergency Recovery Program (NERP). This program focused on the short-term emergency reconstruction and rehabilitation of basic economic and social infrastructure, with a view to laying the basis for medium term recovery and longer term development. While it was envisaged that much of Lebanon's reconstruction would be undertaken by the private sector, initial post-war rehabilitation and reconstruction in the wake of 15 years of war was clearly the responsibility of government. Indeed, the private sector lacked the resources and willingness at the immediate post-war stage to undertake major infrastructure investments, many of which involved rehabilitation. The CDR has subsequently developed a broader, longer term, investment program - Plan Horizon 2000. It aims at rebuilding and expanding economic, social and institutional infrastructure to underpin a private sector-led recovery and continued social stability.

Donors and official lenders have supported the reconstruction program over the last four years by funding projects executed or currently being executed at an average annual level of US\$750 million. About 35% has come from regional donors, and about 40% from Europe - of which over half in the form of loans from the European Investment Bank and export credits. Of the balance (about 25% of the total), more than two-thirds came from the World Bank. Overall, about half of the funding was on concessional terms, with grants representing about one-third of total concessional funding.



External Funding by Source (\$bn)



Official External Funding by Sector (%)

Given the magnitude of damage, the needs for initial reconstruction and recovery far exceeded the support extended by donors and official lenders. Thus, funding of the initial phase of post-war reconstruction and recovery was to a large extent based on a domestic effort. Despite the depressed post-war income levels, government fiscal revenues have risen from just 6.5% of GDP in 1990 to 17% in 1995. During the first half of 1996 revenues were up 25% in US\$ terms over the corresponding period of 1995, in spite of the setback suffered as a result of the April attack. At the same time, the Government has contained non-interest current expenditures, and as a result the primary current fiscal balance has moved from a deficit of 4.4% of GDP in 1992 to a surplus of 1.5% in 1995. Tariffs for public services have been raised sharply from their 1990 levels. The Government also used US\$1 billion in commercial external borrowing to meet post-war financing needs. At the same time, the infrastructure reconstruction effort also relied on the private sector, including the multibillion task of rebuilding downtown Beirut, the cellular telephone networks, and some of the airport facilities.

Apart from the post-war physical reconstruction needs, the Government also faced sizeable expenditures for social assistance, such as the resettlement of those displaced during the war, relief and compensation for those affected by the subsequent attacks in the South, and farmers who lost their livelihoods as a result of the drug eradication efforts. At the same time, Lebanon continued to face a need to devote scarce resources, badly needed for reconstruction, to defense and security instead.

The Need for Concessional Assistance

Horizon 2000 envisages investments in vital economic projects in the order of US\$ 15 billion over the coming several years. The first phase, up to the year 2000, focuses heavily on basic and social infrastructure.

The Government envisages an increasing reliance on the private sector in the building and operation of infrastructure, and on the operation of public services in order to ensure sustainability of its investments. Recently, major contracts have been awarded for the construction of the Beirut ringroad and the Beirut-Syrian border highway, and for the operation of postal services by a private operator. The Government also expects to rely on non-concessional official sources of finance, such as the World Bank and EIB, as well as market financing from private sources.

The Government hopes that, initially, such access to commercial-type of financing will be facilitated by the provision of official loan guarantees.

The Government will continue to rely on a domestic effort, including further fiscal adjustment and cost recovery, and on non-concessional and private sources of funding for sectors where this is feasible. However, the needs in other sectors, which are less likely to attract commercial or private interest in the medium term, remain very large.

The Lebanese Government seeks donor support for a set of high priority projects (summaries of which are presented in the Annex to this report) with a cost of about US\$ 5 billion in the form of soft loans and grants over the coming five years. These projects are focused in particular on : roads (US\$1.25 billion), water (US\$1.2 billion), the environment (US\$.85 billion), and education (US\$.8 billion). In addition, the government seeks to mobilize loan guarantee facilities in the amount of US \$ 1 billion in order to reduce the cost of supplementary borrowing in the international capital markets.

Financial Mechanism

Lebanon over the past four years has established a strong track record in planning, designing, and implementing multifaceted investment projects. In addition, Lebanon established and maintained excellent working relations with all bilateral and multilateral creditors and donors within the framework of mechanisms adopted by donor countries and financial institutions. Most significantly, Lebanon throughout its history has meticulously honoured its external commitments and obligations. All these factors render Lebanon well placed to enhance significantly its bilateral relations.

The Lebanese Government hopes that during the Friends of Lebanon Conference, donors will indicate amounts they undertake to provide in the form of grants and soft loans and the sectors/projects they are interested in funding.

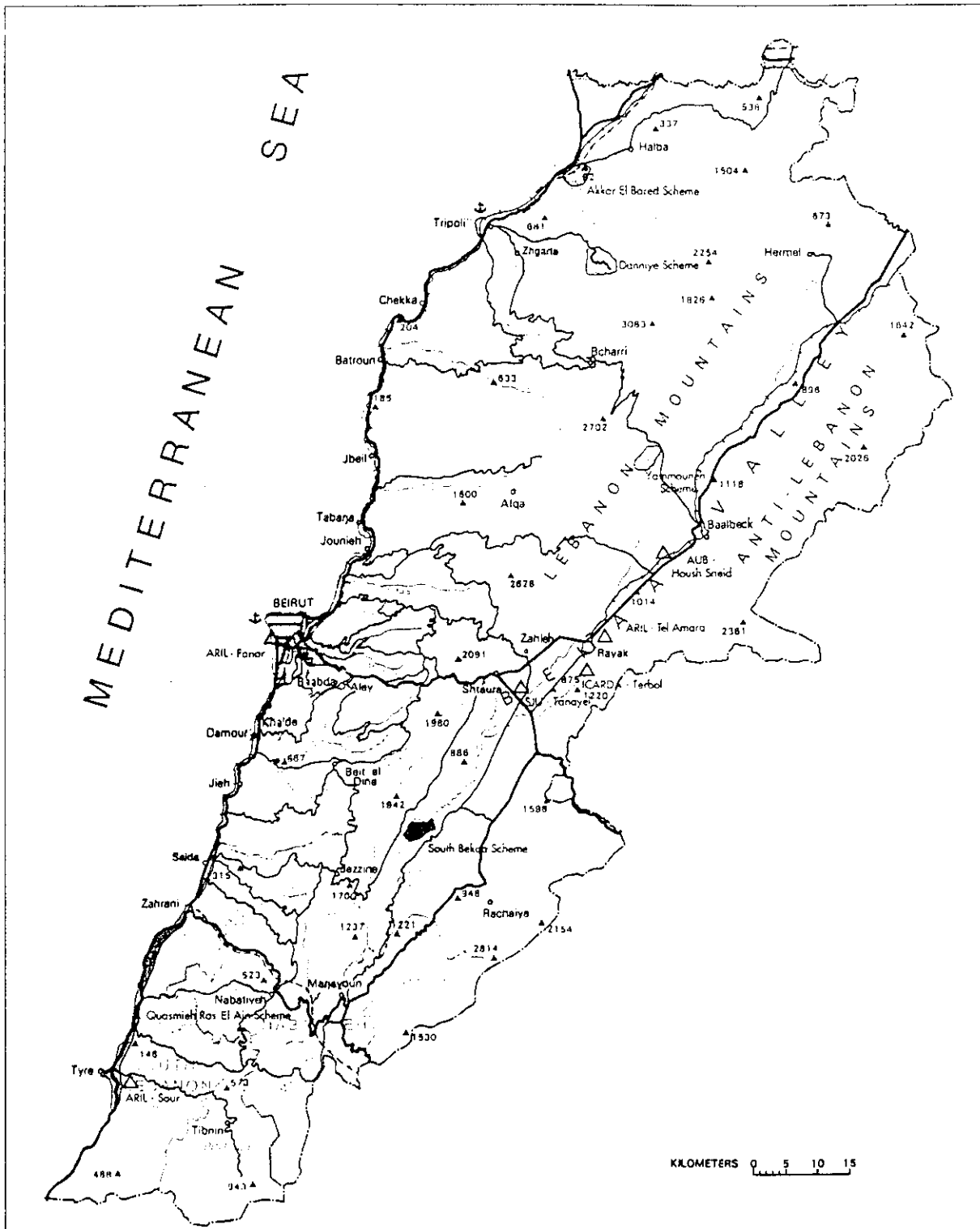
Separate bilateral agreements will be concluded subsequently with individual donors. These agreements will comply with the terms and conditions of each donor.

The proposed mechanism provides flexibility consistent with the current procedures of each individual donor, thereby expediting the conclusion of bilateral agreements and the subsequent disbursement of funds.

Conclusion

The Lebanese Government is determined to pursue reconstruction and development so as to improve the living conditions of its people. The Government is equally determined to modernize and expand its security forces to ensure security throughout its territory.

These dual objectives of security and economic prosperity are a necessity and a prerequisite for peace in the region. The financial resources required to achieve these goals are by far more than what the Lebanese Government can mobilize on its own. The support of Lebanon during this critical period by its friends would not only help the Lebanese eliminate the effects of decades of regional instability, but would also be an investment in long lasting and comprehensive peace and stability.



ANNEX

LIST OF PROGRAMS AND PROJECTS	Amount* (US\$ million)	Page
BASIC INFRASTRUCTURE	1350	
Power Sector Pollution Reduction	100	11
Roads Rehabilitation and Development Program	1250	12-13
SOCIAL INFRASTRUCTURE	1080	
School Renewal	300	14
Vocational and Technical Education (VTE) Expansion	400	15
Lebanese University Campus	130	16
Primary Health Care Expansion	20	17
Hospital Rehabilitation	60	18
New Hospital Equipment	20	19
Low Cost Housing Program	150	20
DAMS AND WATER TRANSPORT	520	
Bisri Dam	150	21
Irrigation Dams	155	22
Hill Lakes	60	23
Awali-Beirut Water Conveyor	155	24
WATER SUPPLY	670	
NERP- Water Supply Rehabilitation and Extension	540	25
Anane Basin	130	26
WASTEWATER AND ENVIRONMENTAL PROTECTION	735	
Mediterranean Coastal Protection	400	27
Industrial Pollution Control	30	28
Inland Water Resources Protection	305	29
INDUSTRIAL INFRASTRUCTURE	45	
Pilot Industrial Estate	45	30
AGRICULTURAL INFRASTRUCTURE AND IRRIGATION	400	
Agricultural Roads	30	31
Reforestation	10	32
Agriculture Schools and Research Centres Rehabilitation	5	33
Agricultural Land Reclamation	75	34
Agricultural Credit	95	35
South Lebanon Irrigation	70	36
Assi Irrigation	65	37
Baalbeck-Hermel Integrated Rural Development (Alternate Crops)	50	38
PUBLIC FACILITIES AND INSTITUTIONS	200	
Internal Security Forces Centre	65	39
Slaughter Houses	35	40
Juvenile Rehabilitation Centres, War Related Stress Hospital & Centres	60	41
Rehabilitation and Construction of Prisons	40	42
TOTAL	5000	

* Figures in the above list and in the program and project profiles may differ due to rounding.

Power Sector Pollution reduction

Project Cost: US\$ 100million

Project Objectives and Description

The project objective is to reduce the emissions of sulphur dioxide (SO₂) resulting from the combustion of primary fuel to international standards. Fuel oil used for power generation in the Lebanon contains a maximum of 2.5% sulphur by weight and the three operating power plants which are the major emitters of SO₂ are located in residential, touristic and agricultural areas and their current emissions are having adverse impacts on local and regional air quality in addition to human health.

Project Components

The project components include the supply, installation and commissioning of the following:

- One line scrubber for one unit of 70MW at the Hraicheh power plant (North Lebanon).
- One line scrubber for four units of 600MW in total at the Zouk power plant (Mount Lebanon).
- One line scrubber for five units of 330MW in total at the Jieh power plant (Mount Lebanon).

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
Power Plant				
Hraicheh	1.5	6.2	0.3	8
Zouk	12	47.6	1.6	61
Jieh	6	24	0.8	31
Total				100

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction, the Ministry of Hydraulics and Electric Resources and the "Electricité du Liban".
- **Status:** Feasibility study completed.
- **Timetable:** The implementation period would be 2 and a half years.

Road Rehabilitation and Development Program

Program Cost: US\$ 1,250million

Program Objectives and Description

Roads are critical to the efficient functioning of the Lebanese economy, being the only mode of internal transport and the main communications link with the regional hinterland which has and expected to continue to be a major factor in the country's development. Lebanon's road network is extensive and well distributed throughout the country (0.63 km/sq. km). Excluding municipal roads, it comprises about 6,330 km of classified roads (international, primary, secondary and local roads). Key issues in the road sector are evident from the following observations: (i) 36 percent of the road network is in poor condition resulting in economic losses of about US\$140 million/year; (ii) bad road conditions (poor drainage, lack of guard rails, signalization, etc.) cause many accidents (about 10-12 fatalities per 100.0 million vehicle-km compared with European Union rates of 2.7 per 100.0 million vehicle-km); and (iii) high traffic densities on some portions of the network, particularly along the coastal highway to the south, the highway from Beirut to the Bekaa valley and around Beirut where traffic volumes in excess of 150,000 vehicles/day are recorded. The motor vehicle fleet has been increasing rapidly and recent estimates indicate a fleet in excess of 1 million vehicles (car ownership ratio of about 1 vehicle to 4 persons).

The Greater Beirut Area is suffering from a severe transportation problem. There is a heavy reliance on the use of private cars and it is estimated that 71 percent of total motorized person trips over half of which are home-work trips are made by private car. Shared taxis cater for about 19 percent of trips. While only 10 percent are served by privately and publicly operated bus services. Latent travel demand is important and stands to materialize with each decrease in the level of congestion. The congestion is further complicated by a severe shortage of parking space.

The objectives of the Government's Road Sector Policy are: (a) to develop the network in ways that promote regionally and socially balanced development of the country; (b) to preserve the existing network, which is a major infrastructure asset critical to the nation's economic well-being, in a cost-effective manner and enhance its safety and efficiency; (c) to reduce the reliance of the road sector on the Government's recurrent budget and increase efficiency in road use over time, by recovering from users the cost of providing roads; (d) to create a strong institutional capacity in the road sector capable of deploying modern planning, design and management technologies to achieve the objectives of this policy; and (e) to develop the capacity of the road sector to mobilize resources to finance the rehabilitation and improvement of the road network.

The proposed program aims at rehabilitating and expanding the existing road network, improving the efficiency of the road sector and establishing the foundations of an efficient urban transport system in the Greater Beirut Area. The overall objectives are to: (i) preserve the road networks, by reducing the backlog in road rehabilitation and periodic maintenance; (ii) provide additional capacity along congested corridors; (iii) improve the connection of local and secondary roads to the main network; (iv) strengthen institutional capacity for maintenance and development of the national and local road networks; and (v) improve the urban transport in the Greater Beirut Area.

Road Rehabilitation and Development Program (Continued)

Programs Components

- Rehabilitation of the main road network. This program component consists of the rehabilitation of all 3,520 km of main roads: international roads (530 km); primary roads (1,650 km); and secondary roads (1,340 km).
- Rehabilitation of 2,810 km of local roads.
- Construction of new main and local roads. Construction of about 315 km of new roads to improve the traffic condition along congested and 315 km of new links to improve the connection of the local and secondary roads to the main network.
- Institutional strengthening and restructuring of the road sector. Consultancy services, training and technical assistance to strengthen the road agencies capacity to implement the program.
- Greater Beirut urban transport immediate action plan. Traffic management measures including: geometric improvements on intersections; revising circulation plans; equipping streets and intersections with traffic control devices; parking facilities; and preparing a medium-term plan for urban transport system. It will also support ongoing actions to reinstate public transport services.

Program Cost Estimate (US\$ million)

Rehabilitation of the main road network	580
Rehabilitation of local roads	165
Construction of new main and local roads	450
Institutional strengthening of the road sector	2
Greater Beirut urban transport immediate action plan	53
Total	1,250

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction (CDR), the Ministry of Public Works, the Ministry of Transport, and the Municipalities of Greater Beirut Area.
- **Status:** Road rehabilitation components. Comprehensive studies were carried out to help design the road rehabilitation components. The road rehabilitation programs shows an overall rate of return of 30 percent and the efficiencies expected would translate to net savings of about US\$140 million per year in reduced vehicle operating costs and maintenance expenditures once the program has been implemented. A pilot national road rehabilitation program has been launched with World Bank support. New roads component: Detailed engineering have been launched for several new roads. Urban transport component. Work is on-going to complete detailed studies and technical specifications for the Greater Beirut urban transport immediate action plan component.
- **Timetable:** The implementation period would be 5 years.

School Renewal

Project Cost: US\$ 300million

Project Objectives and Description

About three quarters of existing public basic education facilities are rented buildings not designed for educational purposes. The objective of this project is to achieve an equitable distribution of adequate facilities for public basic education in all districts by constructing new schools for about 138,000 students in the public education system. This project constitutes the first phase (307 new schools) of a larger program planned to be implemented in four phases over the next decade. With the emergency rehabilitation of existing schools now largely completed, the overall program objective is to provide facilities for 600,000 additional students in the public education system by 2007. The schools will be of three different sizes: small (315 students), medium (630 students), large (945). They will be designed for respectively nine grades (3 for pre-primary and 6 for primary) for elementary schools, three grades for intermediary schools and three grades for secondary schools.

Project Components

- Construction of 114 elementary schools
- Construction of 123 intermediate schools
- Construction of 70 secondary schools

	Elementary Schools				Intermediate Schools				Secondary Schools			
	small	medium	large	total	small	medium	large	total	small	medium	large	total
Total	67	34	13	114	79	39	5	123	51	18	1	70

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Contingencies	Total
Total	228	28	14	30	300

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction (CDR) and the Ministry of National Education, Youth, and Sports (MNEYS).
- **Status:** A Master Plan Study has been prepared. Detailed studies for similar schools are available. MNEYS has acquired land.
- **Timetable:** The implementation period would be 6 years.

Vocational and Technical Education (VTE) Expansion

Project Cost: US\$ 400million

Project Objectives and Description

During the war years, Lebanon suffered considerable loss of skilled workers as a result of external migration. The main objective of this project is to meet the needs for skilled industrial and non-industrial labor for the reconstruction and development phase. The project aims at upgrading and developing the vocational and technical public education system to achieve appropriate balance between academic education and vocational training systems. The project constitutes the second phase of a larger program of construction and equipment of new schools and training centers and upgrading of existing training facilities to provide about 107,000 new seats in the vocational and technical education system. The proposed project would comprise 118 new schools of three types: small (400 students), medium (800) and large (1200).

Project Components

The project consists of the following four main components:

- Construction and equipment of 82 small schools.
- Construction and equipment of 18 medium schools.
- Construction and equipment of 18 large schools.
- Upgrading and equipment of existing schools.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Contingencies	Total
Small schools (construct. & equip.)	106	66	5	18	195
Medium schools (construct & equip.)	43	29	2	8	82
Large school (construct. & equip.)	54	30	3	9	96
Upgrading & equip. of existing facilities	6	17	2	2	27
Total	209	142	12	37	400

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction (CDR) and the Ministry of Vocational and Technical Education (MVTE).
- **Status:** A master plan for vocational technical education expansion has been prepared. Detailed studies for similar schools are available. MVTE has acquired land for a major part of the schools.
- **Timetable:** The implementation period would be 7 years.

Lebanese University Campus

Project Cost: US\$ 130million

Project Objectives and Description

Eight faculties of the Lebanese University are operating in buildings not designed for educational purposes and their students lack essential campus facilities. The objective of this project is the creation of a model campus for higher education and research in Lebanon as well as in the Middle East. The project the construction of appropriate facilities in one main campus in order to replace the scattered faculties operating in inconveniently located and inadequate buildings. It will also allow more efficient centralized management. This project would comprise: (i) construction of eight faculties, and (ii) construction of campus and administration facilities.

Project Components

- Construction of eight faculties: (i) Fine Arts (1,470 students); (ii) Public Administration (300); (iii) Medical Sciences (1,380); (iv) Pharmacy (200); (v) Law and Political Sciences (7,300); (vi) Public Health (1,000); (vii) Communication (1,150); and (viii) Literature and Humanities (7,300).
- Construction of campus facilities: Administrative buildings, dormitories; technical area; transport terminal; parkings; catering facilities; restaurant; tower and underground water reservoirs; and underpass and utility tunnels.

Project Cost Estimate (US\$ million)

Construction of eight faculties	
Construction of campus and administration facilities	
Total	130

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction (CDR), the Ministry of Culture Higher Education (MCHE) and the Lebanese University.
- **Status:** Detailed design and tender documentation have been completed for the construction of eight faculties and campus facilities.
- **Timetable:** The implementation period would be 5 years.

Primary Health Care Expansion

Project Cost: US\$ 20million

Project Objectives and Description

The project aims at improving accessibility to primary health services. It involves planning, developing and commissioning new and old health centers in all regions in order to enhance the level of services and improve accessibility to preventive, curative and rehabilitative out-patient community based services. At present, Lebanon has about 760 out-patient facilities ranging from small dispensaries to large health centers distributed throughout the country. Approximately 80 percent of these facilities are administered by NGOs and 20 percent by the Ministry of Health (MOH). The MOH facilities had their activities interrupted during the war period. This project is in accordance with the new health sector policy promoted by MOH to reinforce primary health care programs to decrease the number of hospital admissions. This project will comprise: rehabilitation and equipment of 31 health centers; and equipment for 5 new health centers.

Project Components

	Rehabilitation of 31 health facilities				Equipment for new health facilities
	laboratory kidney dialysis	medical centers	health centers	dispensaries	
• Beirut and Mount Lebanon	3	2	3	-	1
• North Lebanon	-	1	4	2	1
• South Lebanon	-	4	6	1	2
• Bekaa	-	-	3	2	1
Total	3	7	16	5	5

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
Total	13	6	1	20

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction (CDR) and the Ministry of Health (MOH).
- **Status:** The new health centers are under construction.
- **Timetable:** The implementation period would be 2 years (2 years for rehabilitation of the 31 existing centers and 1 year for equipment of the six new facilities).

Hospital Rehabilitation

Project Cost: US\$ 60million

Project Objectives and Description

The objectives of the proposed project are to improve accessibility to public health services and increase the efficiency of the public health system by increasing the capacity of health facilities and upgrading existing facilities. These facilities will be located in underserved low and middle income areas. The proposed hospitals will serve as referral facilities for the primary care network. It will provide required technical and logistic support to health centers and general practitioners. This project represents the second phase of a larger program consisting of reconstruction and equipment of 8 hospitals. Mount Lebanon and North Lebanon governorates have a ratio of 0.2 beds per 1,000 inhabitants while the ratio for South Lebanon and Bekaa governorates is equivalent to 0.6. The total number of public hospital beds in Lebanon is 700.

Project Components

- Quarantina hospital (200 beds): Reconstruction and equipment of the old hospital totally damaged during the war.
- Equipment for four hospitals: Sibline (70 beds), Tibnine (50 beds), Jezzine (40 beds) and Hermel (70 beds).
- Shahar El Gharbi hospital (40 beds), Khirbit Kanafar and Marjeyoun hospitals: Facilities extension, and rehabilitation and equipment.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
Total	34	23	3	60

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction (CDR) and the Ministry of Health (MOH).
- **Status:** The existing Quarantina hospital in Beirut will soon be demolished to clear the site for the proposed new hospital. Technical specifications for equipment are under preparation for all proposed hospitals.
- **Timetable:** The implementation period would be 2 years for rehabilitation works and equipment and 1 year for projects which require only equipment.

New Hospital Equipment

Project Cost: US\$ 20million

Project Objectives and Description

The objective of the project is to complete the construction and equipment of 5 hospitals being built with regional donors' support. Funding has already been obtained for civil works, and the proposed project would finance the necessary equipment.

Project Components

The main components are equipment for:

- Tripoli Hospital (200 beds).
- Bouar, Saida and Zahle Hospitals (70 beds each). They will provide medical services for highly populated underserved areas.
- Hasbaya Hospital (40 beds).

Project Cost Estimate (US\$ million)

Tripoli Hospital	8.2
Bouar, Saida and Zahle Hospitals	10.1
Hasbaya Hospital	1.7
Total	20

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction (CDR) and the Ministry of Health (MOH).
- **Status:** Tripoli hospital is operating. Hasbaya hospital is under construction; and three hospitals (Bouar, Saida and Zahle) are at the design stage.
- **Timetable:** The implementation period would be 3 years.

Low Cost Housing Program

Project Cost: US\$ 150million

Project Objectives and Description

In the housing sector, there is a strong tradition of reliance on private sector initiatives. The government response to the housing situation emerging from the war has been to focus initially on putting in place programs targeted at repair and reconstruction of the existing stock and the problems arising from the displacement of the population. At the same time, the government launched several projects of repair and rehabilitation of existing infrastructure and upgrading of principal networks in selected neighborhoods mainly Beirut suburbs. Another issue arising from the years of war has been the conflicting claims on property rights through illegal occupancy of land and buildings. The scale of low income squatter settlements are particularly noticeable in the suburban sections to the south as well as in some of the northern suburbs. The objective of the proposed program is to support the implementation of the resettlement plans of major urban redevelopment programs. One resettlement plan is being implemented by Elissar, a public autonomous agency recently established to redevelop a 546 ha zone along the coast in the Beirut southern suburbs. Two other similar resettlement plans will be included in the proposed Low Cost Housing Program.

Project Components

- **Elissar Low Cost Housing (1,500 units).** The resettlement plan which includes both cash and relocation options is designed to serve about 70,000 people. The affected people will all be compensated in cash or relocated within the redevelopment site or in the surrounding neighborhoods. The project consists of constructing 1,500 low cost housing to help implementing the initial phase (about 7,000 people) of Elissar's resettlement plan. They will be rented at an affordable cost on a long term lease basis. The subsequent phases of the resettlement plan will be financed by Elissar. This component consists of (i) site preparation: clearing of the selected relocation site (30 ha) which was used as dumping area; (ii) construction of off site and on site infrastructure; and (iii) construction of 1,500 housing units.
- **Other Low Cost Housing Components (3,000 units).**

Project Cost Estimate (US\$ million)

Site preparation	43
Construction of off site and on site infrastructure	27
Construction of 4,500 housing units	80
Total	150

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction and Elissar.
- **Status:** Baseline surveys and community consultations were carried out, and design are ongoing for the Elissar component.
- **Timetable:** The implementation period would be 3 years.

Bisri Dam

Project Cost: US\$ 150million

Project Objectives and Description

The objective of this project is to supply the Greater Beirut Area with water from the Bisri Dam using the Awali-Beirut conveyor. This project is complementary to the Awali-Beirut conveyor project and water supplied under this project will substitute for the water abstracted from the Awali river allowing the latter to be used for irrigation in the South Lebanon region. A very limited volume of water from the Bisri Dam will be used for irrigation purposes in the region.

Project Components

- Embankment Dam (74m high and 100 Million cu.m. capacity)
- Small hydro-electric power station to serve local villages (1.4MW)
- Spillway
- Diversion outlets

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
Embankment Dam	78	19		97
Hydro-electric power station		2		2
Spillway	18	8		26
Diversion outlets	11	7		18
Consultancy			7	7
Total				150

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction.
- **Status:** Feasibility study and geotechnical surveys completed. Design and tender documents to be completed by the end of 1996.
- **Timetable:** The implementation period would be 3 and a half years.

Irrigation Dams

Project Cost: US\$ 155million

Project Objectives and Description

Project Objectives and Description: The project objective is to increase the availability of irrigation water, improve productivity and agricultural yield and optimize on the use of available water resources in North Lebanon and other regions of Mount and South Lebanon.

The project includes the construction of two dams in North Lebanon increasing the irrigated area by 6,300ha and a study of three other potential dams that are expected to irrigate an area of 20,000ha in the South , North and Mount Lebanon.

Project Components

	Irrigated area	Irrigable area	Capacity(millioncu.m.)
• North Lebanon:			
Zghorta	500	1,300	10
Koura	1,500	7,000	55
• Feasibility studies for three potential irrigation dams in Akkar (North Lebanon), Chouf (Mount Lebanon) and Marjeyoun(South Lebanon).			

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Contingencies	Total
North Lebanon:					
Zghorta	29	8	4	4	45
Koura	59	16	7	16	98
Feasibility studies for the three potential dams in Akkar,Chouf and Marjeyoun			12		12
Total					155

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction.
- **Status:** Preliminary studies completed for irrigation dams in North Lebanon.
- **Timetable:** The implementation period would be 5 years.

Hill Lakes

Project Cost: US\$ 60million

Project Objectives and Description

The project objective is the promotion of rainwater and run-off harvesting for supplemental irrigation of crops in the summer season. The project is expected to optimize on the use of rain water and surface run-off for irrigation purposes in agricultural areas that suffer at present from acute water shortage during the dry season. The project will complement existing irrigation schemes and will provide irrigation water for an additional 8,000ha. The project includes the construction of fourteen hill lakes with a storage capacity of 1.5 million cu.m. each and one hill lake with a capacity of 8 million cu.m. in addition to related irrigation networks.

Project Components

The hill lakes are distributed as follows:

- North Lebanon Akkar (4No.), Donieh (2No.), Batroun (2No.)
- Beka'a Baalbeck (4No.), Hermel (1No.)
- Mt. Lebanon Metn (1No.)
- South Lebanon Tyr (1No.)

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Contingencies	Total
	40	10	5	5	60
Total					60

Implementation Arrangements, Status and Timetable:

- **Implementation:** The Council for Development and Reconstruction.
- **Status:** Detailed design and tender documents to be prepared.
- **Timetable:** The implementation period would be 5 years.

Awali - Beirut Water Conveyor

Project Cost: US\$ 155million

Project Objectives and Description

The objective of the proposed project is to meet present and future demand for domestic and non-domestic water in the Greater Beirut Area. The proposed water conveyor will transmit 6cu.m./sec of treated water from the Awali River to Greater Beirut through a 24km concrete lined tunnel aqueduct that conveys water by gravity from an existing hydroelectric water intake at Joun to a treatment plant at El Ouardaniya, and then to a storage reservoir in Greater Beirut. The water treatment plant at El-Ouardaniya will have an initial capacity of 260,000 cu.m./day to be increased to 520,000 cu.m./day at low incremental cost.

Project Components

- Construction of a water treatment works.
- Transmission line of 24km long in concrete lined tunnel.
- Transmission line in a 9km of 1400mm diameter twin-steel pipe.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
Treatment Works	23	34.5	4	61.5
Tunnel	51	22	3	76
Twin-steel pipeline	5	11.5	1	17.5
Total				155

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction.
- **Status:** Feasibility, geotechnical surveys and engineering design and tender documents are complete
- **Timetable:** The implementation period would be 3 years.

**National Emergency Recovery Programme (NERP)
Water Supply Rehabilitation and Extension**

Project Cost: US\$ 540million

Project Objectives and Description

The objective of this project is the completion of the rehabilitation and extension of essential water supply and wastewater facilities identified initially under the National Emergency Recovery Programme where financing gaps have arisen due to cost overruns, namely in parts of Beirut, the Bekaa, Mount Lebanon, and South Lebanon. The first year's rehabilitation work, covering the whole of Lebanon with cofinancing from EIB/IBRD, has been satisfactorily completed. However, as the rehabilitation /extension works have progressed, the magnitude of the task has become more evident, the shortcomings of the damage assessments have become apparent and cost overruns have occurred in the water and wastewater sector and the need for immediate improvements of water supply and wastewater services has become paramount.

The rehabilitation and upgrading of this sector is of highest priority to the Government and is expected to provide an improved standard of water supply and wastewater services and will encourage the resettlement of displaced persons back to their towns and villages where facilities have been damaged by war. Finally, the project will contribute to the reduction of water losses through leakage control operations and will provide water to unserved urban and rural areas.

Project Components

The project components include the rehabilitation, upgrading and extension of the water and wastewater systems in the country and includes namely boreholes, main transmission and distribution pipelines, new reservoirs, pumping stations, leakage detection equipment and wastewater collection systems.

Project Cost Estimate (US\$ million)

		Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
Water	Greater Beirut	23.5	29.5	4	57
	North Lebanon	37.5	56	6.5	100
	Mount Lebanon	48	73	8	129
	Bekaa	52	80	9	141
	South Lebanon	36.5	54	6.5	9
Wastewater		9	6	1	16
Total					540

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction (CDR), the Ministry of Culture Higher Education (MCHE) and the Lebanese University.
- **Status:** .Damage assessment, feasibility study completed. Engineering designs and tender documents on-going.
- **Timetable:** The implementation period would be 4 years.

Anane Basin Water Supply

Project Cost: US\$ 130million

Project Objectives and Description

The project objective is to utilize available surface and groundwater resources in the Anane Basin to increase water supply to the districts of Iklm El-Kharoub, Saida, Sour and Nabatieh. The present water resources allocated to the project area includes limited number of springs and boreholes.

The scheme is expected to improve water supply in the above mentioned areas to an average of 100 to 120 litres/person/day. The project covers an area of 1,213 sq.km. and includes 260 communities and an estimated population of about 0.5 million which is projected to double by the year 2020.

Project Components

The project components include four borehole excavations, six new treatment plants with capacities ranging from 8,500cu.m./day to 52,000cu.m./day; five pumping stations and 87 km of pipes with diameters ranging from 200mm to 1000mm in addition to 23 reservoirs ranging in capacity from 1000cu.m. to 30,000cu.m.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
	52	70	8	130
Total				130

Implementation Arrangements, Status and Timetable

- **Implementation:**The Council for Development and Reconstruction.
- **Status:** Masterplan and feasibility study completed.
- **Timetable:** The implementation period would be 5 years.

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Mediterranean Coastal Protection

Project Cost: US\$ 400million

Project Objectives and Description

The project objective is the reduction of health hazards in densely populated areas of the Lebanese coast while reducing groundwater and marine pollution and assisting Lebanon to comply with the treaties for the protection of the Mediterranean.

The project includes major schemes that concentrate on Greater Beirut and Tripoli, the two biggest cities in Lebanon. The program complements on-going projects for Kesrouan, Saida and Sour supported by the EIB, Japan and the World Bank.

Project Components

The project includes wastewater collection systems, primary and secondary wastewater treatment plants, pumping stations and sea outfalls.

Project Cost Estimate (US\$ million)

		Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
Major Scheme					
• Greater Beirut	Ghadir Catchment	43	58	5	106
	Dawra Catchment	38	46	4	88
• Tripoli		131	62.5	12.5	206
Total					400

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction.
- **Status:** Detailed design and tender documents due for completion by the end of 1996.
- **Timetable:** The implementation period would be 4 years.

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 مركز مشاريع ودراسات القطاع العام

Industrial Pollution Control

Project Cost: US\$ 30million

Project Objectives and Description

The project objective is to provide financial incentives to major polluting industries in Lebanon in order to encourage cooperation and shared investment in the form of support and subsidies for waste minimization and the establishment of treatment facilities. The most critical impact of the industrial sector on the environment in Lebanon is the uncontrolled disposal of untreated solid and liquid wastes. Industrial growth is expected to reach 8% per year, implying a doubling of output and waste generation in 9 years. The small size of industrial establishments in Lebanon imposes high costs of pollution control and firms are constrained by lack of financial resources. Subsidies in the form of concessionary finance or grants for specific schemes over a pre-determined time frame will be provided while ensuring the system is not open to abuse.

Project Components

- Technical Assistance and consultancies to the Ministry of Environment and Ministry of Industry and Petroleum (MIP) on waste minimization procedures by type of industry.
- Provision of financial incentives to major polluting industries in the form of support and subsidies for waste minimization and the establishment of treatment facilities. Financial assistance for the design and preparation of tender documents for individual and shared industrial waste treatment facilities will be included.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Total
	10	20	30
Total			30

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction and the Ministry of Environment and the Ministry of Industry and Petroleum.
- **Status:** Industrial waste management plan for Lebanon to be completed by the end of 1996.
- **Timetable:** The implementation period would be 5 years.

Inland Water Resources Protection

Project Cost: US\$ 305million

Project Objectives and Description

To introduce proper collection and wastewater treatment facilities in twenty four inland catchment areas in order to protect surface and groundwater resources from pollution, minimize health hazards, reduce the cost of treating potable water and provide adequate wastewater disposal facilities.

Project Components

- The project components include the construction of wastewater collection networks and appropriate small and medium treatment works.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
North Lebanon	34	43	4	81
Mount Lebanon	32	46	4	82
Bekaa	31	48	4	83
South Lebanon	26	30	3	59
Total				305

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction.
- **Status:** Master Plan completed. Detailed design and tender documents due for completion by the end of 1997.
- **Timetable:** The implementation period would be 4 years.

Pilot Industrial Estate

Project Cost: US\$ 45million

Project Objectives and Description

The project objective is the promotion of a well equipped pilot industrial zone located on public land in Qraya (Mount Lebanon) that can serve as a model for the future development of industrial zones in Lebanon. Industrial activity is responsible for a sizable portion of the GNP and the Lebanese government is determined to promote industrial developments in the country through the creation of fifteen new industrial zones that are equipped with modern infrastructure in all the regions of the country. The new industrial areas are expected to act as incentives for existing and future industries to relocate in a better-equipped environment and help to stem the rural to urban migration through the creation of job opportunities in remote rural areas of Lebanon.

Project Components

- Equipping an area of 1.8Million sq.m. with basic infrastructure at a cost of US\$25 per sqm
- Basic infrastructure includes sewerage network and shared wastewater treatment plant, water supply system, reservoirs and pumping stations, street lighting, electrical sub-stations, telephone network.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
	17.2	24.7	3.1	45
Total				45

Implementation Arrangements, Status and Timetabl

- **Implementation:** The Council for Development and Reconstruction and the Investment Development Authority of Lebanon (IDAL).
- **Status:** Detailed design on-going and expected date of commissioning is June 1997.
- **Timetable:** The implementation period would be 2 years.

Agricultural Roads

Project Cost: US\$ 30million

Project Objectives and Description

The project objective is to improve access to isolated rural and agricultural areas in order to facilitate the marketing of agricultural products through the upgrading and construction of 750km of agricultural roads.

The proposed project complements the government's yearly rehabilitation program of 50km per year and another on-going World Bank funded program that covers 300km of agricultural roads to be implemented over six years. The damage assessment has revealed that 4,000km of agriculture roads are in need of rehabilitation.

Project Components

- Technical Assistance and studies (Strengthening management capacity of the Green Plan).
- Rehabilitation works for 750km of agricultural roads to be implemented over 5 years.
- Equipment and facilities.

Project Cost Estimate (US\$ million)

	Civil Works	Consultancy/ Techn. Assist.	Contingencies	Total
	27	2	1	30
Total				30

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction and the Green Plan of the Ministry of Agriculture.
- **Status:** Condition assessment completed.
- **Timetable:** The implementation period would be 5 years.

Reforestation

Project Cost: US\$ 10million

Project Objectives and Description

The project objective is the prevention of soil erosion, water loss environmental protection and the preservation of Lebanon's natural resources. In 1982, the FAO has estimated the country's need for new forest areas to be equivalent to 200,000ha. The Ministry of Agriculture has already undertaken a number of reforestation programs in various areas of Lebanon. This project will complement the Ministry's on-going budget funded programme and will rely on both the private sector and NGOs for its implementation.

Project Components

- Preparation of a detailed reforestation implementation plan.
- Restoring four nurseries at a total capacity of 90 000plants.
- Preserving an area of 5000ha in the first phase.
- Reforestation of an area of 4500ha.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment.	Consultancy/ Techn. Assist.	Total
	7	1.5	1.5	10
Total				10

Implementation Arrangements, Status and Timetable

- **Implementation:** Ministry of Agriculture using the private sector and NGOs.
- **Status:** A project implementation plan is being prepared.
- **Timetable:** The implementation period would be 5 years.

Agricultural Schools and Research Centres Rehabilitation

Project Cost: US\$ 5million

Project Objectives and Description

The project objective is the upgrading of the main agricultural schools and research centres in the country and the improvement of their teaching programmes in order to reflect the current market needs in Lebanon and the region. The project includes rehabilitation works as well as the provision of technical assistance, equipment, training and research facilities.

Project Components

- Rehabilitation works for seven agricultural schools and four research centres.
- Procurement of equipment and facilities.
- Technical assistance and studies including training of existing staff.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
	2.9	1.6	0.5	5
Total				5

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction and the Ministry of Agriculture.
- **Status:** Tender documents for agricultural schools completed.
- **Timetable:** The implementation period would be 5 years.

Agricultural Land Reclamation

Project Cost: US\$ 75million

Project Objectives and Description

The project objective is to provide financial and technical assistance to farmers in order to achieve sustainable development of their land holdings and improve its agricultural productivity. The programme will implement land reclamation projects in 15,000ha that represent one third of the actual land reclamation need in the country. These projects are expected to upgrade land productivity through the construction of reservoirs, the rehabilitation of terraces and the improvement of land drainage. The project includes strengthening of the management capacities at the Green Plan in order to accelerate the implementation of land reclamation projects. The project complements a World Bank funded program that covers an area of 3,000ha and which will be implemented over 6 years.

Project Components

- Institutional strengthening.
- Land Reclamation of 15,000 ha.
- Building water retaining structures and small reservoirs (< 500,000 cu.m.).
- Improve land drainage.

Project Cost Estimate (US\$ million)

	Civil Works	Consultancy/ Techn. Assist.	Total
	72	3	75
Total			75

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction and the Green Plan.
- **Status:** Green Plan land reclamation on-going.
- **Timetable:** The implementation period would be not less than 10 years.

Agricultural Credit

Project Cost: US\$ 95million

Project Objectives and Description

The project objectives are to increase the agricultural output and reduce production cost by improving the farmer's access to formal credit not easily available from the banking system. The above objectives will be achieved through the provision of credit at reasonable market-based interest rate to farmers, small agro-industries, cooperatives and rural entrepreneurs through the newly established National Bank for Agricultural Development.

For the area of Baalbeck-Hermel, this project will complement the Integrated Rural Development Programme and will promote income substitution for illicit crops and improve the socio-economic conditions in the area. Credit will be provided in the form of seasonal loans for 5,000 farmers, medium-term loans for equipment and livestock for 600 farmers, long-term loans for plantations, buildings and on-farm irrigation systems, agro-industry and micro-business.

Project Components

- Credit provided through the National Bank for Agricultural Development (NBAD)
- Credit provided through the Baalbeck-Hermel Integrated Rural Development Programme (IRDP)

Project Cost Estimate (US\$ million)

Credit provided through the National Bank for Agricultural Development	35
Credit provided through the Baalbeck-Hermel Integrated Rural Development Programme	60
Total	95

Implementation Arrangements, Status and Timetable

- **Implementation:** The National Bank for Agricultural Development (NBAD) and the Ministry of Agriculture.
- **Status:** A law creating the NBAD has been recently enacted. An operational base for credit delivery under IRDP has been established in the region of Baalbeck-Hermel.
- **Timetable:** The implementation period would be 5 years.

South Lebanon Irrigation

Project Cost: US\$ 70million

Project Objectives and Description

The project objective is to increase agricultural production and optimize on the use of limited water resources in the region. The project will lead to the irrigation of 15,000ha of agricultural land in the Litani Basin using water from the Litani river in South Lebanon.

Project Components

- Updating of feasibility study and undertaking detailed design and tender documents preparation.
- Construction of a concrete canal with a capacity of 12 cu.m./sec and 50km long.
- Construction of a pumping station to irrigate 3,000ha.
- Irrigation networks.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
	45	20	5	70
Total				70

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction.
- **Status:** Feasibility study and preliminary design undertaken in 1962 and require updating.
- **Timetable:** The implementation period would be 5 years.

Assi Irrigation

Project Cost: US\$ 65million

Project Objectives and Description

The project objective is to use Lebanon's annual share of 80 million cu.m. from the Assi river to improve the irrigation of 4,000ha and increase the amount of irrigated land to 6,000ha in the North Beka'a region (Hermel). The inhabitants of the Hermel area depend heavily on irrigated agriculture and this project is vital for the economic development of the area.

An area of 2,000ha in the Hermel region will be irrigated by pumping to an elevation of 70m above the diversion dam located at Ain Zarqua spring. In addition, an area of 1,800ha will be irrigated in the Beka'a region by pumping an elevation of 75m above Ain Zarqua dam and another 2,200ha by gravity from a large proposed dam on the Assi river.

Project Components

- Updating and the preparation of the final design and tender documents.
- Construction works.
- Construction of one pumping station.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
	50	10	5	65
Total				65

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction.
- **Status:** Preliminary design and geotechnical and topographical surveys have been completed since 1987.
- **Timetable:** The implementation period would be 5 years.

Baalbeck-Hermel Integrated Rural Development (Alternate)

Project Cost: US\$ 50million

Project Objectives and Description

The Baalbeck-Hermel area is a remote rural and underserved area. In the course of the war, illicit crops (cannabis and opium) were developed, with a peak in the years 1985-90. Illicit crops were eradicated during 1991-93. The United Nations Development Control Program (UNDCP) and the United Nations Development Program (UNDP) have helped design an Integrated Rural Development Program for Baalbeck-Hermel area to promote income replacement for illicit crops and improve socio-economic conditions. As part of such a program, the proposed project will support government activities that lead towards poverty eradication and sustainable development in the area.

Project Components

- Natural resources management, environment Improvement, protection, soil/water conservation, revegetation of degraded land with terracing (3,000 ha) and construction of small earth-dams and irrigation systems.
- Communal/Social Services: Water, waste water, solid waste, health services and farm roads to serve about 200,000 residents.
- Research/Extension Services.
- Support to local community institutions.
- Program Management Unit. Technical assistance services.

Project Cost Estimate (US\$ million)

Natural resources management/environmental protection	20
Communal/social services	20
Research/extension services	3
Support to local communities	2
Program Implementation Unit	5
Total	50

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction (CDR).
- **Status:** During the pilot phase of the program (1994-96) several approaches have been developed and an operational base established in the region.
- **Timetable:** The implementation period would be 5 years.

Internal Security Forces Center

Project Cost: US\$ 65million

Project Objectives and Description

In the past five years, the number of social security forces has increased to reflect Lebanon's need for improving the level of internal security. This has entailed the modernization of physical facilities through the construction and equipping of a modern training and education center for the Internal Security Forces at Aramoun. The built-up area of the Centre is equivalent to 100,000sq.m. and is expected to accommodate 3000 members of the Internal Security Forces.

Project Components

The project consists of the construction of the following four components:

- Training Center for 2,000 members
- Barracks for the motorized forces
- Vehicle services' center
- General works

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
Total	34.2	25.5	5.3	65

Implementation Arrangements, Status and Timetable

- **Implementation:** Council for Development and Reconstruction.
- **Status:** Detailed design and bidding documents already completed.
- **Timetable:** The implementation period would be 2 years.

Slaughter Houses

Project Cost: US\$ 35million

Project Objectives and Description

The project objective is to construct a number of public slaughter houses that comply hygienic standards set by the local public health authorities and protect the environment through proper disposal of slaughter house wastes. The project represents the first phase of a comprehensive program aimed at constructing four slaughter houses in major agglomerations in the country.

Project Components

Each of the four slaughter houses include the following areas:

• Barns	4,500 sq.m.
• Slaughtering areas	1,500 sq.m.
• Refrigeration units	3,000 sq.m.
• Offices	1,000 sq.m.
• Maintenance shops	300 sq.m.
Total	10,000 sq.m.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Contingencies	Total
Greater Beirut (Amrousieh)	3	6	0.3	0.8	10.1
Tripoli	2	6	0.3	0.8	9.1
Zahle	2	5	0.2	0.7	7.9
Saida	2	5	0.2	0.7	7.9
Total	9	22	1	3	35

Implementation Arrangements, Status and Timetable

- **Implementation:** The Council for Development and Reconstruction.
- **Status:** Detailed design and bidding documents completed.
- **Timetable:** The implementation period would be 2 years.

Juvenile Rehabilitation Centers, Wars Related Stress Hospital

Project Cost: US\$ 60million

Project Objectives and Description

This project aims at dealing with the social effects of the war years on the youths of Lebanon. It targets, specifically, treatment of drug abuse, re-education and counseling of affected and troubled youths and juvenile delinquents and the mental and physical rehabilitation of psychological and physical handicaps.

Project Components

- **Mental and Physical Rehabilitation Center:** This component consists of the construction of a mental and physical rehabilitation center mainly for war related stress.
- **Juvenile Centers:** This component consists of the construction of four regional centers for the treatment, counseling and detention of 1,000 juvenile delinquents in Mount Lebanon and Beirut, Bekaa, North Lebanon and South Lebanon.
- **Youths Social Centers:** This component consists of the construction of four regional centers for the counseling and assistance of troubled youths and their families in Mount Lebanon and Beirut, Bekaa, North Lebanon and South Lebanon.

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
Mental and Physical Rehabilitation Center	15	4	1	20
Juvenile Centers	20.3	7.5	2.2	30
Youth Social Centers	5	4.5	0.5	10
Total	40.3	16	3.7	60

Implementation Arrangements, Status and Timetable

- **Implementation:** Ministry of Social Affairs / Ministry of Health / Ministry of Interior.
- **Status:** Assessment of needs has been undertaken by the Ministry of Social Affairs.
- **Timetable:** The implementation period would be 4 years.

Rehabilitation and Construction of Prisons

Project Cost: US\$ 40million

Project Objectives and Description

Over the last twenty years, three of the main prisons in Lebanon have been totally destroyed resulting in serious overcrowding and substandard conditions at the remaining prisons in the country. The project aims at improving the physical conditions of existing Lebanese prisons and increasing their intake capacity through the extension of the Roumieh central prison and the construction of two new regional prisons in Saida and Zahleh. This is expected to alleviate prison congestion and introduce re-education and rehabilitation programs.

Project Components

The project consists of the following components:

- Rehabilitation and extension of the central Roumieh prison (Capacity 3000 prisoners)
- Construction of two regional prisons in Saida and Zahleh (Capacity 1500 prisoners each).

Project Cost Estimate (US\$ million)

	Civil Works	Equipment	Consultancy/ Techn. Assist.	Total
Roumieh Prison	9	6	1	16
Saida Prison	7	4.5	0.5	12
Zahle Prison	7	4.5	0.5	12
Total	23	15	2	40

Implementation Arrangements, Status and Timetable

- **Implementation:** Council for Development and Reconstruction.
- **Status:** Tender Documents to be completed by June 1997.
- **Timetable:** The implementation period would be 3 years.

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