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Report No. P-5982-LE

**MEMORANDUM AND RECOMMENDATION**  
**OF THE**  
**PRESIDENT OF THE**  
**INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT**  
**TO THE**  
**EXECUTIVE DIRECTORS**  
**ON A PROPOSED LOAN TO THE**  
**LEBANESE REPUBLIC**  
**FOR AN**  
**EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT**

**FEBRUARY 9, 1993**

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## CURRENCY EQUIVALENTS

(As of January, 1993)

Currency Unit = Lebanese Pound

US\$1.0 = LL 1,840

## ABBREVIATIONS

<b>BdL</b>	<b>=</b>	<b>Banque du Liban</b>
<b>BIS</b>	<b>=</b>	<b>Bank of International Settlements</b>
<b>CDR</b>	<b>=</b>	<b>Council for Development and Reconstruction</b>
<b>CG</b>	<b>=</b>	<b>Consultative Group</b>
<b>EC</b>	<b>=</b>	<b>European Community</b>
<b>EdL</b>	<b>=</b>	<b>Electricité du Liban</b>
<b>ERRP</b>	<b>=</b>	<b>Emergency Reconstruction and Rehabilitation Project (Bank funded)</b>
<b>GDP</b>	<b>=</b>	<b>Gross Domestic Product</b>
<b>GEF</b>	<b>=</b>	<b>Global Environmental Fund</b>
<b>HB</b>	<b>=</b>	<b>Housing Bank</b>
<b>ILO</b>	<b>=</b>	<b>International Labor Organization</b>
<b>IMF</b>	<b>=</b>	<b>International Monetary Fund</b>
<b>LL</b>	<b>=</b>	<b>Lebanese Pound</b>
<b>METAP</b>	<b>=</b>	<b>Mediterranean Environmental Technical Assistance Program</b>
<b>MHER</b>	<b>=</b>	<b>Ministry of Hydraulic and Electric Resources</b>
<b>MTEVT</b>	<b>=</b>	<b>Ministry of Technical Education and Vocational Training</b>
<b>NERP</b>	<b>=</b>	<b>National Emergency Reconstruction Program (1993 - 1996)</b>
<b>ONL</b>	<b>=</b>	<b>Office National du Litani</b>
<b>PB</b>	<b>=</b>	<b>Participating Banks</b>
<b>PMU</b>	<b>=</b>	<b>Program Management Unit</b>
<b>SIU</b>	<b>=</b>	<b>Sectoral Implementation Unit</b>
<b>SLA</b>	<b>=</b>	<b>Subsidiary Loan Agreement</b>
<b>TCC</b>	<b>=</b>	<b>Technical Coordination Committee</b>
<b>UNDP</b>	<b>=</b>	<b>United Nations Development Program</b>
<b>UNESCO</b>	<b>=</b>	<b>United Nations Educational, Scientific and Cultural Organization</b>

## FISCAL YEAR

(January 1 to December 31)

LEBANESE REPUBLICEMERGENCY RECONSTRUCTION AND REHABILITATION PROJECTLoan and Project Summary

<u>Borrower:</u>	Lebanese Republic	
<u>Beneficiary:</u>	Council for Development and Reconstruction; Ministries of Hydraulic and Electric Resources, Environment, Technical Education and Vocational Training, Post and Telecommunications, and Finance; Electricité du Liban; and households with impaired housing conditions.	
<u>Amount:</u>	US\$175 million equivalent	
<u>Terms:</u>	IBRD standard variable interest rate, with 17-year maturity, including 4 years of grace	
<u>Financing Plan:</u>	Government	US\$ 35.4 million
	Private Sector	US\$ 13.5 million
	World Bank	<u>US\$175.0 million</u>
	Total	<u>US\$223.9 million</u>
<u>Economic Rate of Return:</u>	Not Applicable	
<u>Staff Appraisal Report:</u>	None; a Technical Annex is attached	
<u>Map:</u>	IBRD No. 24330	

This report is based on the findings of three missions, all of which visited Lebanon in 1992. The Appraisal Mission comprised Messrs. Youssef Choucair (mission leader, urban and housing specialist), Lars Rasmusson (water and wastewater engineer), Albert Peltekian (municipal engineer), Salem Ouahes (power engineer), Jamal Saghir (privatization specialist), David Howarth (procurement advisor), Hadi Abushakra (lawyer) and Jean Akl (consultant in technical education). Messrs. Gerard Buttex and Pierre Rasmussen (telecommunication experts) and Paul Geli, Anthony Mills, Lars Bevmo and Ghassan Chaccour (consultants) participated in earlier missions. Mr. Laurens Hoppenbrouwer (country officer) provided substantive contribution to the economic sections of this memorandum. The project documents were reviewed by the Ad Hoc Advisory Group comprising Messrs./Mme. A. Harth, I. Christie, D. Lomax, D. Howarth, D. Gulstone, R. Buckley, M. Pommier and A. Kreimer. The managing Division Chief is Alastair McKechnie and the Department Director is Ram Chopra. The Regional Vice President is Caio Koch-Weser.

**MEMORANDUM AND RECOMMENDATION OF THE PRESIDENT  
OF THE INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
TO THE EXECUTIVE DIRECTORS  
ON A PROPOSED LOAN  
TO THE LEBANESE REPUBLIC  
FOR AN EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT**

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1. I submit for your approval the following memorandum and recommendation on a proposed loan to Lebanon for the equivalent of US\$175 million to help finance an Emergency Reconstruction and Rehabilitation Project (ERRP), as part of a larger US\$2.25 billion National Emergency Reconstruction Program (NERP). The loan would be at the Bank's standard variable interest rate, with a maturity of 17 years, including 5 years of grace. Cofinancing for the NERP is expected from at least eight donors.
2. **Background.** Lebanon, a prosperous upper middle-income country in the mid-1970s, has been devastated by 17 years of turmoil resulting from violent civil strife and military occupation. Much of the country's capital stock has been destroyed or is severely deteriorated; a quarter of the population has been displaced and now lives in unhealthy shanty towns, in semi-destroyed buildings or in other people's homes. Overcrowding is severe and housing quality is inadequate. Public and social services are either unavailable or of poor quality; only about one third of electricity capacity is operational; water treatment and sewage disposal are virtually nonexistent; and most schools and hospitals are damaged. The loss in human resources has been considerable: hundreds of thousands have been killed or disabled, and a large number of professionals and entrepreneurs have left the country, thus weakening institutions. By 1990, real per capita income, at around \$1,000, was only about one third of the 1975 level. Total damage has been estimated by the United Nations at \$25 billion, and the country has enormous reconstruction needs.
3. Following the 1989 Ta'if Accord for National Reconciliation, sponsored by the Arab League, the first steps were taken towards restoring normal life. The Government revived the Council for Development and Reconstruction (CDR) and entrusted it with the task of preparing a recovery strategy; government authority was gradually restored in the course of 1990 as fighting came to an end and the militias were disbanded.
4. During 1991, an improved security situation and some initial reconstruction activity contributed to a significant recovery in output from the depressed levels of 1989/90 when fighting had been particularly intense. Spurred by large inflows of private capital, in response to political and economic stabilization, activity took off in virtually every sector of the Lebanese economy. Real GDP grew by over 40 percent from the depressed 1990 level. Moreover, in 1991, the Government succeeded in reducing inflation from 84 percent the year before to about 30 percent at year's end, and in stabilizing the exchange rate. However, the stabilization program was unsustainable in the absence of fiscal correction, particularly since interest payments on Treasury bills that were issued to absorb the large speculative capital inflows further increased the fiscal imbalance. As a consequence, the economic situation worsened in 1992, as the fiscal deficit widened significantly after the Government awarded a 200 percent retroactive increase in public wages. This triggered a large outflow of capital and pressures on the Lebanese pound. The Central Bank initially attempted to defend the value of the currency, but, in the absence of fiscal adjustment, this effort was futile and resulted in a loss of reserves of about US\$0.5 billion. Subsequently, the pound depreciated by more than 50 percent between February and May 1992, which, because of the openness of the economy, in turn resulted in an acceleration of inflation. This crisis, which particularly affected the poorest segment of the population, triggered a national strike and forced the Government to resign in May 1992. The new Government installed in May failed to control the fiscal deficit; exchange rate depreciation proceeded at a rapid pace, and inflation reached 155 percent for the first nine months of 1992. These developments also depressed GDP growth to an estimated 10-15 percent in 1992.

5. Following Parliamentary elections in September 1992, a new Government took office on October 31, 1992. It now faces the challenging task of restoring economic stability, which is a precondition for attracting private and official financing for the reconstruction program. Increased confidence inspired by the new Government has led to significant short-term private capital inflows, including conversions from US dollar to Lebanese pound deposits, which has reversed the depreciation of the exchange rate and enabled the Central Bank to replenish its reserves (to about US\$1.5 billion by end-1992) and the Government to switch from Central Bank to domestic debt financing of its deficit. As a result, inflation is estimated to have come down to single-digit levels. The Government has announced that the restoration of fiscal balance is one of its key objectives. This will require relatively drastic fiscal action through a combination of measures that raise government revenues from the 1992 level of only 10 percent of GDP—including customs duties, petroleum taxes and real estate taxes—and restrict current budget expenditures. The latter would include a reduction in budget transfers through adjustments in electricity tariffs and a containment of the wage bill by limiting wage increases and eliminating ghost workers from the payroll. Over the past months the Government has already initiated a number of fiscal actions, including administrative measures to improve income and real estate tax collection, the elimination of wheat subsidies, the elimination of exemptions to customs duties, increases in telephone charges and electricity connection fees and measures to improve electricity tariff collection.

6. Stabilization measures are being implemented, and it is expected that the current budget deficit will be sharply reduced from the estimated level of around 10 percent of GDP in 1992, and virtually eliminated by 1994. Lebanon needs substantial amounts of external assistance in support of stabilization and reconstruction. Despite the projected improvement in fiscal performance, external loans and grants will be required to finance the reconstruction of Lebanon's infrastructure. External public debt was estimated at about US\$360 million (8 percent of GDP) at the end of 1991 and is low by any standard. In spite of the difficult circumstances, Lebanon has met its debt service obligations with the Bank, and its current outstanding obligations amount to only about US\$20 million. While the level of public debt is projected to quintuple to about US\$1.8 billion over the next four years because of the external financing required for the NERP, debt indicators would remain low. The external public debt to GDP ratio would be around 24 percent, and the external public debt service to exports ratio would be less than 5 percent by the mid-1990s, which would be manageable considering the country's projected improved fiscal capacity to service debt.

7. The medium-term projections suggest that the deficit in the current account of the balance of payments, which currently is around 50 percent of GDP, would initially remain high because of the import needs associated with the reconstruction program but would gradually decline to about 20 percent of GDP by the end of the decade. It is expected that a large share of the external financing needs of the economic recovery will be met by private capital, as credibility in the Lebanese economy is being restored. With political and economic stability, private flows are likely to be forthcoming in the magnitude required.

8. **Country Recovery Strategy.** Rebuilding the ravaged economy and returning to sustainable growth requires a phased program comprising : (i) a short-term emergency reconstruction phase (1993-1996) for which the Government prepared the NERP; and (ii) a medium-term recovery phase (1996-2000). While much of Lebanon's reconstruction and restoration of productivity can be expected to be undertaken by the private sector, government support is crucial, particularly in the short-term reconstruction phase. The short-term reconstruction would involve: (a) emergency repairs and rehabilitation to remove infrastructure bottlenecks and restore productivity; (b) the implementation of economic stabilization measures that would facilitate the mobilization of donor support and the repatriation of the private capital needed to finance medium- and long-term investments; (c) the alleviation of severe social hardships and poverty; and (d) the rebuilding of the institutional capacity of public agencies, with emphasis on economic infrastructure. Both reconstruction and recovery phases

require considerable external assistance. As a result of the reconstruction and recovery program, Lebanon is expected to regain its ability to pursue progress primarily based, as in the past, on private sector led development.

9. **Bank Response and Assistance Strategy.** Although the Bank has been inactive in Lebanon for nearly a decade and a half, it responded promptly to Lebanon's request for assistance in jump starting the economy. In July 1991, Bank staff participated in the first external mission to the country since 1988, the United Nations Needs Assessment mission. In October 1991, the Bank fielded an economic data gathering mission, which formed the basis for a Bank report that was circulated to the participants of a Donor Coordination Meeting, chaired by the Bank in December 1991. Subsequently, the Bank assisted the Government in the preparation of damage assessment studies for key infrastructure and for the NERP. Bank economic missions visited Lebanon in 1992, and a draft Country Economic Memorandum has been prepared and recently discussed with the Government. The dialogue based on this report formed the basis for a broad understanding between the Government and the Bank on macroeconomic policies for stabilization and reconstruction. The report is now being finalized for distribution to the Board during the current fiscal year.

10. The Bank's strategy for the short-term phase aims to assist Lebanon in rebuilding its ravaged economy and in laying the ground for sustainable growth. This would comprise direct support for the NERP in areas where the Bank has comparative advantage and could apply the lessons learned from 30 years of emergency assistance; in collaboration with the IMF, the Bank is also helping to develop a comprehensive, short-term stabilization program. At the same time, the Bank would play a catalytic role in mobilizing and coordinating aid for the reconstruction effort.

11. In addition to large-scale financial support for reconstruction works, Lebanon requires massive technical assistance to compensate for the qualified and experienced public staff who left the country during the war. The Bank would work closely with the United Nations Development Programme (UNDP) in establishing a technical assistance trust fund aimed at channeling and coordinating the technical assistance likely to be available from several multilateral and bilateral sources. Also, direct support, with a technical assistance component for the strengthening of economic management and the establishment of appropriate institutional and regulatory frameworks to permit private sector participation in the provision of infrastructure services, is being proposed under the ERRP.

12. Beyond the three-year emergency operation, the Bank's lending program would focus on: (i) addressing the significant needs in the social sectors, including the rehabilitation of basic infrastructure in the education and health sectors, technical and vocational training and housing; and (ii) rehabilitating and expanding capacity in key infrastructure sectors (water supply and transport), which would have high returns as they would remove existing bottlenecks to output growth. While proceeding with the proposed ERRP, the Bank would assist the Government in inducing private sector investment in the same sectors and in strengthening institutions.

13. **Donor Coordination.** In December 1991, at the Aid Coordination meeting chaired by the Bank, the international donor community manifested interest in supporting the reconstruction of the Lebanese economy. Donors have already shown their readiness to cooperate and work with the Bank and one another during the preparation of the NERP and the design and preappraisal of the ERRP. It is envisaged that Aid Coordination or Consultative Group (CG) meetings would be convened during each of the next three fiscal years.

14. **Program Description.** The Government NERP is a broad-based multisectoral operation, designed to remove infrastructure bottlenecks, reduce social problems and lay the foundation for medium- and long-term recovery (see para. 8). The NERP to be implemented over a three and one-half year

period, encompasses 15 sectors that can be grouped in 5 main areas of intervention: infrastructure, social sector services, production activity, government building reconstruction, and technical assistance.

**15. Estimated Program Cost and Financing Plan.** The total cost of the Government's NERP is estimated at US\$2.25 billion (including contingencies), with a foreign exchange component of US\$1.91 billion or 85 percent. The public investment component of the NERP is estimated at US\$1.69 billion (75 percent). Externally financed housing sector credit is estimated at US\$0.21 billion and technical assistance (including project and non-project related) at US\$0.30 billion. Present donor commitments and promises indicate that the NERP would be supported by: (i) the proposed Bank loan of US\$0.17 billion; and (ii) identified financing of US\$0.68 billion from donors. The financing gap of US\$1.40 billion is expected to be financed by the Government and by other donors to be identified at the CG meeting planned for the second quarter of 1993. (See Financing Plan in Schedule A.) It is expected that substantial support from the donors will be mobilized (see para. 13). In any event, an external financing shortfall for the NERP as a whole would not affect the implementation of the ERRP, except possibly the housing component (see para. 57 of the Technical Annex).

**16. Project Objectives.** The ERRP would assist the Government, within the framework of the NERP, to: (i) rehabilitate, repair and reconstruct damaged physical and social infrastructure facilities and housing; and (ii) strengthen the Government's institutional capabilities in implementing the NERP. Because Lebanon needs time to attract private investors, to bring order to its public finances and to eliminate unsustainable macroeconomic imbalances, the proposed ERRP is not in itself a vehicle for policy reform. However, the ERRP has been designed to ensure that actions necessary for its successful implementation will be compatible with future sectoral and macroeconomic reform programs.

**17. Project Description.** The proposed loan would support the following components within the NERP: (i) the reconstruction and rehabilitation of water and wastewater facilities; (ii) the rehabilitation of electricity distribution facilities; (iii) the purchase of equipment and the rehabilitation of treatment facilities for solid waste collection and disposal; (iv) the reconstruction and re-equipment of damaged vocational and technical training facilities; (v) the reconstruction and repair of damaged houses and the construction of new houses, giving priority to displaced households; and (vi) technical assistance in support of the economic management and the restructuring of infrastructure services. In order to maintain some flexibility to adjust to changing circumstances and priorities, including donor interests, the ERRP is designed to permit a reallocation of funds within each sector and between sectors. Such reallocations would be decided at the yearly reviews of implementation performance. (Further details are provided in the Technical Annex.)

**18. Project Cost and Financing Plan.** The total cost of the ERRP is estimated at US\$223.9 million, including physical contingencies (8 percent of base cost) and price contingencies (6 percent of base cost). The Bank loan would finance US\$175 million, covering 78 percent of the project costs; the private sector would finance US\$13.5 million (6 percent of total cost); and the Government would finance US\$35.4 million (16 percent of total cost).

**19. Disbursement and Procurement.** Amounts and methods of procurement and a disbursement schedule are shown in Schedule B. Retroactive financing of US\$13.0 million has been included for consultants services and advance payments for urgent equipment and civil works contracts. A timetable of key project processing events and the status of Bank Group operations in Lebanon are given in Schedules C and D, respectively. Photographs and a map are also attached.

**20. Project Implementation.** The Bank's ERRP would be implemented over a three-year period by existing sector ministries and the CDR. The CDR would be strengthened to perform the program management function, while Sector Implementation Units (SIUs) would be created within each sector

ministry concerned to reinforce the ministry's capacity for implementation. A Program Management Unit (PMU) has been created in the CDR. The staffing of the PMU and SIUs would complement and reinforce existing capabilities and would include existing government specialists assisted by foreign and local consultants. The European Community (EC) would finance, on a grant basis, most of the costs of the consultant contracts supporting the PMU and SIU. A yearly review of the ERRP would be carried out by Bank staff and government officials to assess progress and resolve implementation problems.

**21. Rationale for Bank Involvement.** Social and economic stability is a prerequisite for economic recovery in Lebanon. As Lebanon needs immediate assistance to restore stability, the Bank's help is vital. The proposed loan would provide part of the financial resources required to remove the infrastructure bottlenecks; it would also play a critical role in reestablishing the confidence of private investors and in attracting the commitment of other official donors who have made it clear that they regard the Bank's leadership as vital to their own decision to provide support to the NERP. The proposed loan is consistent with Bank strategy for the country (see para. 10). In particular, the proposed project would help rebuild consumers' confidence in the reliability of infrastructure and would encourage them to pay for the services they receive. The increased revenues would, in turn, help alleviate the government fiscal deficit by reducing direct subsidies. In this context, the project is consistent with the macroeconomic stabilization objectives of the Government.

**22. Actions Agreed.** The Government has taken initial actions to ensure effective program and project implementation. With the assistance of Bank staff, the overall responsibilities of sectoral ministries and of the CDR have been clearly defined and agreed to by the officials concerned. The PMU has been set up, and arrangements for the recruitment of consultants for the SIUs are underway and would be completed by the beginning of project implementation. Moreover, the Government is fully committed to institutional reform in the infrastructure sectors. Policy statements (for improving cost recovery and the efficiency of the management of infrastructure services) are being prepared with the assistance of Bank staff and will be finalized by December 31, 1993. Also, the Government provided assurances that it would allocate budget resources for the recurrent costs that cannot be covered through internal cash generation and that operation and maintenance services would be contracted to private sector firms wherever a public agency is incapable of adequately performing these tasks. The Government would also obtain funds from other donors at concessional terms, to lower the average cost of funds for the housing component.

**23. Environmental Aspects.** The deteriorated conditions in Lebanon due to war damages cause a severe risk to public health and the environment. The main hazards are: the polluted water distribution system; scattered solid waste dumping all over the country; and heavy air pollution due to the extensive use of individual diesel-powered generators (needed to offset the loss of publicly generated and distributed electricity), heavy traffic, open solid waste burning and the bad quality of fuel. The ERRP, by providing assistance to the sectors most concerned - water, wastewater, solid waste and electricity - would mitigate the hazards to the environment and public health. However, being an emergency operation, the ERRP would only remedy the most urgent problems. Subsequent measures, to be formulated during NERP implementation, would be addressed under a separate Bank assistance program to be funded by the Mediterranean Environmental Technical Assistance Program (METAP) and the Global Environmental Facility (GEF). The project is classified as Category B.

**24. Benefits.** The proposed Bank ERRP would have economic and social benefits. Economic benefits would comprise (i) the restoration of infrastructure services that are critical to the resumption of production; and (ii) the rebuilding of consumers' and investors' confidence, which is essential for generating revenues from user charges and attracting private funding for infrastructure investments, thereby, alleviating the Government's fiscal deficit. Social benefits would include: (i) improvements in public health, through the reduction of domestic water contamination and the removal of sewage from the



streets; (ii) the mitigation of some of the effects of social dislocation, through the rehabilitation of damaged and destroyed housing units and educational facilities; and (iii) a reduction in social hardship, through the generation of work opportunities in the construction industry.

25. **Risks.** The main risks to the proposed Bank project would be the security situation and implementation constraints. Some parts of the country, particularly those along the southern borders with Israel, continue to experience incidents that would make them unsafe for the implementation of works financed under the project. Bank supervision missions would monitor the situation, and, if necessary, adjustments would be made in the allocation of funds for specific subprojects. In order to reduce the implementation risk, the project, as part of the NERP, provides for technical assistance to improve implementation capacity. The main risks to the overall reconstruction program and recovery strategy would be the failure by the Government to establish and maintain a viable macroeconomic framework and ensure political stability. In the absence of macroeconomic and political stability, the program could not be fully financed and implemented, and the private resources required for associated investments in the economy would not be forthcoming. Also, the fiscal capacity to service the debt to be contracted for the program could be in doubt. However, the Government has indicated that establishing and maintaining adequate macroeconomic balance is one of its key objectives. At the same time, the aspirations of a people recovering from nearly two decades of conflict, as well as evolving regional initiatives, make it more likely than ever that political stability can be maintained in Lebanon.

26. **Recommendation.** I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank and recommend that the Executive Directors approve it.

Lewis T. Preston

Attachments  
Washington, D.C.  
February 9, 1993

**LEBANESE REPUBLIC**  
**NATIONAL EMERGENCY RECONSTRUCTION PROGRAM (NERP)**  
**ESTIMATED COST & FINANCING PLAN**  
 (US\$ million)

	COST			FINANCING										
	LOCAL	FOREIGN	TOTAL	IBRD	EC/EIB	IFAD	AFESD	KFAED	IDB	FRANCE	ITALY	UNDP/FAO	TOTAL	FINANCE GAP(1)
<b>INFRASTRUCTURE</b>														
Electricity	27.5	267.4	294.9	35.0			75.0	35.0		9.8	39.6		194.4	108.5
Telecoms.	21.5	141.3	162.8					6.7		9.0	45.8		61.5	101.3
Water Supply	33.3	154.0	187.3	43.8							10.0		53.8	133.5
Waste Water	19.5	91.5	111.0	16.2							12.9		29.1	81.9
Solid Waste	23.7	57.5	81.2	30.0							13.0		43.0	38.2
Transport:													0.0	0.0
Roads	27.7	184.7	212.4										0.0	212.4
Public Transport	0.6	24.5	25.1								16.7		16.7	8.4
Airport	18.0	132.5	150.5								19.7		19.7	130.8
Ports	14.2	100.5	114.7										0.0	114.7
Subtotal	186.0	1,153.9	1,339.9	125.0	0.0	0.0	75.0	41.7	0.0	18.8	157.7	0.0	418.1	921.8
<b>SOCIAL</b>													0.0	
Education	25.0	124.9	153.9	15.0	10.4				2.0	2.0	3.9		33.3	120.6
Health	16.2	50.6	66.8								12.5		12.5	54.3
Housing:													0.0	
Reconstr. Loans (see note 2)	0.0	206.3	206.3	25.0									25.0	181.3
Upgrade Informal Areas	65.0	16.0	81.0										0.0	81.0
TA	1.6	-	1.6										0.0	1.6
Subtotal	107.8	401.8	509.6	40.0	10.4	0.0	0.0	0.0	2.0	2.0	16.4	0.0	70.8	438.8
<b>PRODUCTION</b>													0.0	
Agriculture	17.1	100.9	118.0			4.0					7.9		11.9	106.1
Industry	8.0	18.0	26.0										0.0	26.0
Oil & Gas	8.0	56.1	64.1						0.3				0.3	63.8
Services	-	12.4	12.4										0.0	12.4
Subtotal	33.1	187.4	220.5	0.0	0.0	4.0	0.0	0.0	0.3	0.0	7.9	0.0	12.2	208.3
<b>GOV'T BUILDINGS</b>													0.0	
Building Rehabilitation	9.9	56.6	66.5										0.0	66.5
Subtotal	9.9	56.6	66.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.5
<b>MANAGEMENT &amp; TMPL'M.</b>													0.0	
Technical Assistance	3.0	109.3	112.3	10.0									10.0	102.3
Subtotal	3.0	109.3	112.3	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	102.3
<b>UNALLOCATED</b>					298.2				12.4		7.1	19.0	336.7	
<b>TOTAL</b>	339.8	1,909.0	2,248.8	175.0	308.6	4.0	75.0	41.7	14.7	20.8	189.1	19.0	847.8	1,401.0
of which:														
Price & Physical Contingencies	24.8	87.5	112.3											

Source: CDR, Lebanon, 11/1982

Note: (1) Includes Government contributions.

(2) Loans for housing reconstruction, excludes an estimated US\$103 million in beneficiary contributions and domestic banks' cofinancing

IBRD	= International Bank for Reconstruction & Development
EC	= European Community
EIB	= European Investment Bank
AFESD	= Arab Fund for Economic and Social Development
KFAED	= Kuwait Fund for Arab Economic Development
IDB	= Islamic Development Bank
UNDP	= United Nations Development Project
IFAD	= International Fund for Agricultural Development
FAO	= Food and Agriculture Organization
OPEC	= OPEC Fund for International Development
TA	= Technical Assistance

**LEBANESE REPUBLIC**  
**EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)**  
**BANK-FINANCED SECTORS**

(US\$ million)

Bank-Financed Sectors	ERRP			
	Local Cost	Foreign Cost	Total Cost	Bank Financing
Electricity	6.2	35.0	41.2	35.0
Water Supply	7.0	43.8	50.8	43.8
Waste Water	3.5	16.2	19.7	16.2
Solid Waste	15.0	30.0	45.0	30.0
Education	3.7	15.0	18.7	15.0
Housing	13.5 a/	25.0	38.5	25.0
Technical Assistance	1.7 b/	8.3	10.0	10.0
Other sectors	-	-	-	-
<b>Total</b>	<b>50.6</b>	<b>173.3</b>	<b>223.9</b>	<b>175.0</b>

03-Feb-93

Note: a/ Contribution by beneficiaries as downpayments.

b/ Bank financing of US\$175 million includes the local component for Technical Assistance.

<b>LEBANESE REPUBLIC</b>					
<b>EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)</b>					
<b>PROPOSED PROCUREMENT ARRANGEMENTS</b>					
<b>(US\$ million equivalent)</b>					
Project Elements	PROCUREMENT METHOD				TOTAL
	ICB	LCB	OTHER	NBF	
<b>1. Works</b>					
1.1. Buildings	-	14.6	38.5 <sup>a/</sup>	-	53.1
	-	(10.8)	(25.0)		(35.8)
1.2. Civil Works	13.9	9.2	-	11.0 <sup>b/</sup>	34.1
	(5.7)	(6.4)			(12.1)
<b>2. Goods</b>					
2.1. Equipment & Machinery (supply & install, including spares)	109.2	-	4.2 <sup>c/</sup>	-	113.4
	(101.2)		(3.9) <sup>d/</sup>		(105.1)
2.1. Materials	5.5	-	0.6	-	6.1
	(4.7)		(0.5)		(5.2)
<b>3. Consultancies</b>					
3.1. Studies, Engineering and Supervision	-	-	6.9 <sup>e/</sup>	-	6.9
			(6.7)		(6.7)
3.2. Technical Assistance	-	-	10.0 <sup>e/</sup>	-	10.0
			(10.0)		(10.0)
<b>TOTAL</b>	128.6	23.8	60.2	11.0	223.6
	(111.6)	(17.2)	(46.2)	(0.0)	(175.0)

ICB = International Competitive Bidding

LCB = Local International Bidding

NBF = Non Bank-Financed

Other = Employment of IBRD-financed consultants in accordance with WB Guidelines

a/ Housing Component - Line of Credit to Private Sector

b/ Purchase of land for solid waste landfill

c/ Includes proprietary spares from suppliers (US\$ 2.2 million) and shopping (US\$ 2.0 million)

d/ Small items purchased under shopping procedures (US\$0.6 million)

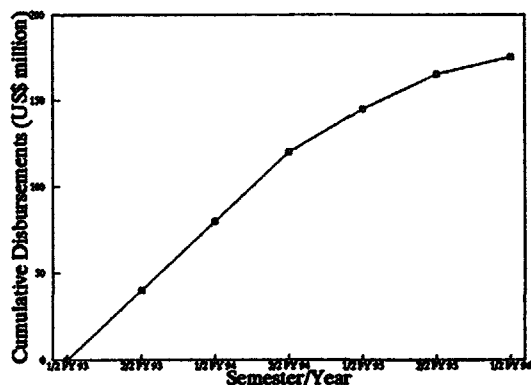
e/ Services to be procured in accordance with Bank Guidelines for Consultants

Note: Figures in parenthesis are the respective amounts financed by the Bank

Figures may not add due to rounding

**LEBANESE REPUBLIC  
EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)  
ESTIMATED BANK DISBURSEMENTS BY SEMESTER  
(US\$ million)**

Bank FY & Semester	Disbursements	Cumulative Disbursements	Percentage of Total
<b>1993</b>			
1	0.0	0.0	0%
2	20.0	20.0	11%
<b>1994</b>			
1	20.0	40.0	23%
2	40.0	80.0	46%
<b>1995</b>			
1	40.0	120.0	69%
2	25.0	145.0	83%
<b>1996</b>			
1	20.0	165.0	94%
2	10.0	175.0	100%



**DISBURSEMENTS**

Loan Category	Amount of Loan Allocated (US\$ million)	Percent to be Financed
(1) Civil Works	22	90% prior to July 1, 1994; 60% from July 1, 1994 to June 30, 1995; and 30% thereafter
(2) Equipment & Materials	94	100% of foreign expenditures, 100% of local expenditures (ex-factory cost) and 80% of local expenditures for items procured locally
(3) Consultants' Services	16	100%
(4) Sub-loans	25	100%
(5) Unallocated	18	

**LEBANESE REPUBLIC  
EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)  
TIMETABLE OF KEY PROJECT PROCESSING EVENTS**

<b>(A) Time taken to prepare:</b>	<b>Six months</b>
<b>(B) Prepared by:</b>	<b>Government's Council for Development &amp; Reconstruction (CDR) and IBRD</b>
<b>(C) First IBRD mission:</b>	<b>July, 1992</b>
<b>(D) Appraisal mission departure:</b>	<b>November 28, 1992</b>
<b>(E) Negotiations:</b>	<b>January 25, 1993</b>
<b>(F) Planned date of effectiveness:</b>	<b>March 30, 1993</b>

**LEBANESE REPUBLIC  
EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)  
STATUS OF BANK GROUP OPERATIONS IN LEBANON**

**A. STATEMENT OF BANK LOANS**

(as of September 30, 1992)

Loan No.	Fiscal Year	Borrower	Purpose	Amount less cancellations (US\$ MILLION)	
				Original Principal	Undisbursed
LN. 0129	1956	Litani River Authority	Electric Power and Irrigation	27.0	0.0
LN. 0877	1974	Republic of Lebanon	Education	5.0	0.0
LN. 0944	1974	Republic of Lebanon	Highway	32.7	0.0
LN. 1476	1978	Republic of Lebanon	Reconstruction	29.0	0.0
			Total	93.7	0.0
			of which repaid	73.6	
			Total held by Bank	20.1	

**B. STATEMENT OF IFC INVESTMENTS**

(as of November 30, 1992)

Fiscal Year	Obligor	Type of Business	Amount (US\$ MILLION)	
			Loan	Equity
1978	Lebanon Textiles S.A.L.	Spinning Weaving & Finishing	1.82	0.00
1975	Lebanon Textiles S.A.L.	Spinning Weaving & Finishing	5.89	0.00
1975	Bank of Near East S.A.L.	Mortgage Banks	0.00	1.25
1971	Lebanese Ceramic Industries	Mfg. of Structural Clay Products	1.20	0.00
1971	Fillitex S.A.L.	Spinning Weaving & Finishing	0.93	0.00
		Total Gross Commitments	9.84	1.25
		Less: repayments, cancellations, exchange adjustments, terminations and sales	9.84	1.25
		Total Commitments held by IFC	0.00	0.00
		Total Undisbursed	0.00	0.00
		Total Outstanding IFC	0.00	0.00

**LEBANESE REPUBLIC**

**EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT**

**TECHNICAL ANNEX**



**LEBANESE REPUBLIC**  
**EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT**

**TECHNICAL ANNEX**

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## I. BACKGROUND AND STRATEGY

1. Prior to the eruption of civil war, Lebanon was enjoying a high rate of economic growth. Between 1964 and 1973, the growth in GDP averaged 6.2 percent per annum in real terms. The national budget was balanced, the balance of payments generated surpluses and the national currency was strong. The service sectors, namely trade, tourism and finance, were the driving force of the free-market system, which attracted business from surrounding oil-based economies. However, in the absence of a well-defined government strategy in the social sector, economic success was threatened by growing disparities in income and wealth.

2. In 1975, civil war erupted, and the country went through different waves of violence, civil strife and military occupation. After 1975, the economy deteriorated markedly, with intermittent recovery during the two periods of relative calm, 1978 to 1981 and 1986 to 1988. The destruction affected all sectors: housing, social and physical infrastructure, offices and factories. Despite such prolonged periods of destruction, the people and the economy showed surprising resilience, reactivating output when circumstances permitted. In fact, a large proportion of industry remained unscathed until the conflicts of 1989 and 1990.

3. In September 1989, the Arab League, with the support of the international community, proposed a ceasefire and called for the adoption of a National Accord Charter. The Lebanese National Assembly subsequently convened in Ta'if, Saudi Arabia, and endorsed the Ta'if Accord in October 1989. The Ta'if Accord provides a framework for a return to normalcy and political stability through national reconciliation and a negotiated settlement of the crisis, including political reform.

4. From September 1989 to October 1990, the country (and particularly the eastern part) experienced an outbreak of further violence caused by the rejection of the Ta'if Accord by the Transitional Authority led by General Aoun. The violence was ended with Syrian assistance, and a National Reconciliation Government was formed. The city of Beirut was reunified after the departure of the militias, which was dissolved by the Government in March 1991. The national army was reunified, and government authority was reestablished over the Greater Beirut area and most of the national territory. In September 1992, new parliamentary elections were held, and on October 31 a new Government was formed.

5. **Overall Economic and Social Impact.** The civil war had a severe impact on the socio-economic conditions in the country, reflected by the impoverishment of the population and the almost complete disappearance of the middle class. The monthly minimum wage, which stood at US\$135 in 1975, decreased to US\$50 in October 1992. Real per capita GNP (currently about US\$1000) has fallen to about one third of the 1975 level, and income inequalities have increased substantially. While in 1973 the level of per capita income was 42 percent above the average of all middle-income countries, by 1988 it had fallen to 65 percent below the average.

6. The impact of the civil war on social conditions was equally grave. Nearly one quarter of the population has been displaced and now lives in unhealthy shanty towns, in semi-destroyed buildings and in other people's homes. Overcrowding and inadequate housing for the displaced are major problems. About 55 percent of displaced households suffer from severe overcrowding; 21 percent do not have private water supply connections (compared to 8 percent prior to displacement); and 48 percent are housed under unstable conditions - that is in dwellings constructed on illegally occupied land or in illegally occupied buildings (compared to 6 percent prior to displacement).

7. **Damage Assessment.** The total damage to physical assets sustained by the Lebanese during the past 17 years was estimated by the United Nations at US\$25 billion;<sup>1/</sup> all sectors have been affected: housing, social infrastructure and services, and commercial and industrial businesses. The loss in human resources has been considerable. Apart from the loss of life and the disabling of hundreds of thousands of people, about 200,000 professional and skilled Lebanese have sought employment in the neighboring Arab oil-producing countries, in Europe and in the USA. Amongst the resident population, unemployment is estimated at 35 percent of the labor force.

8. The damage assessments carried out by the Government in the first quarter of 1992 clearly illustrate the devastation that has occurred in the country. Some of this is due to direct war damage, while some is due to the accumulated effects of a total disruption of normal life. Capital investment to replace or extend systems has virtually ceased, and maintenance has been inadequate due to the lack of funds, personnel and spare parts and equipment.

- Only about 50 percent of telephone connections are in service; and there is only about a 10 percent chance of completing a call successfully.
- The electricity system has an installed generating capacity of about 1600 MW, but only about 500 to 600 MW is actually in service. Supplies are rationed to about 6 hours per day.
- All water treatment plants have been damaged and are operated at reduced capacity. Only 10 percent of chlorinators, essential for the disinfection of the water and for public safety, are still functional.
- There are no functioning sewage treatment facilities in the country.
- In 1990, 80 percent of water samples collected from springs, wells, reservoirs and water distribution networks were polluted.
- Solid waste collection equipment and vehicles have been almost entirely destroyed, and refuse is piled up along streets, vacant lots and the sea coast.
- Most schools, hospitals and vocational and technical training colleges are severely damaged.
- Nearly one quarter of the housing stock is either damaged or destroyed.

9. Besides depriving the country of the infrastructure services essential for normal life and economic activity, this total deterioration of public services has had two other undesirable effects:

- Unregulated private provision of alternative forms of service (such as self-contained telecommunications systems or diesel generators), which are affordable only to the rich, interfere with the restoration of electricity service and (in the case of generators) pollute the environment.

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<sup>1/</sup> United Nations Inter-Agency Needs Assessment Mission to Lebanon, July 15-24, 1991; Final Report, August 20, 1991 (page 19).

- People are unwilling to pay for public services, at least until they are substantially improved (while increased revenues are essential to rehabilitate the systems).

10. The deterioration in the public sector institutions is not evident in the damage assessments. For example, the telecommunications section of the Ministry of Post and Telecommunications (MPT) has a vacancy rate of 66 percent; even with the use of daily-paid and contract staff there is a 30 percent shortfall. Similarly, at the Ministry of Hydraulic and Electric Resources (MHER) water management staff is, at present, at only 30 percent of its authorized strength. The loss of experienced and qualified staff to posts overseas, and the need for existing staff to hold at least two jobs in order to survive, results in institutional weaknesses that cannot be remedied without substantial reforms.

11. It is not only the technical institutions that have suffered this deterioration. Almost as important, from the perspective of the overall restoration of normal life, is the damage done to supporting institutions such as those concerned with financing house purchases and construction. With approximately one quarter of the 1988 housing stock demolished or severely damaged, people have no access to affordable long-term loans for house reconstruction and repairs.

12. **Government Response and Strategy.** Following the 1989 Ta'if Accord for National Reconciliation, the first steps were taken towards restoring normal life. 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 Five-Year Reconstruction Plan (RP) and a National Emergency Reconstruction Program (NERP). The strategy for rebuilding the ravaged economy and addressing the social problems will be implemented in a phased program comprising: (a) short-term emergency reconstruction and rehabilitation; (b) medium-term recovery; and (c) long-term development. It is expected that much of Lebanon's reconstruction will be undertaken by the private sector, with government support in the first phase.

13. The recovery strategy prepared in December 1991, envisaged a total investment of US\$4.5 billion over a five-year period, representing 18 percent of the total damage of US\$25 billion estimated by the United Nations. Subsequently, the CDR prepared, with Bank assistance, a NERP amounting to US\$2.25 billion over a period of three and one-half years. The NERP comprises US\$1.69 billion in public investments, US\$0.25 billion for credit to the private sector and US\$0.30 billion for technical assistance (including project and non-project related). Urgent rehabilitation work for some schools has already started with EC and Saudi Arabian funding. The Government has also secured financing from the EC for institutional strengthening services. The new Government, formed on October 31, 1992, is expected to reach agreement with the Bank and IMF on an economic stabilization program. When the first steps in the implementation of this program are taken, the Bank will call for a Consultative Group meeting.

14. **Mobilization of External Assistance and Coordination Mechanisms.** Due to the security situation prior to May 1991, only humanitarian assistance was provided by most UN agencies, as well as Arab, European and US governments and NGOs (local and foreign). After May 1991, regional and international donors initiated efforts to provide financial and technical assistance. The Government assigned the aid coordination task to the CDR and requested the Bank's assistance in mobilizing foreign aid. At the Aid Coordination meeting in December 1991, chaired by the Bank, the international donor community showed increasing interest and a willingness to support the reconstruction of the Lebanese economy. External funds secured up to October 31, 1992, in support of the Government's NERP reached US\$151 million in loans and US\$22 million in grants. Additional promises and protocols amount to US\$760 million in loans (including the proposed US\$175 million ERRP) and US\$62.4 million in grants.

15. **Cross-Sectoral Needs and Sectoral Priorities.** Considering the extent of damage inflicted on the economic, physical and social sectors, the Government established priorities for investments in the first three years of the program on the following basis: for physical infrastructure, priority would be given to removing the bottlenecks that are constraining the resumption of economic activity by the private sector; for the social sector, priority would be given to housing repair and reconstruction, to permit the return of displaced households to their villages and houses. Education is a second priority of the social sector with particular emphasis given to primary education and vocational training, which is important for the integration into society of the unemployed labor force—including the former militia elements—and for the reconstruction phase. Moreover, the cross-sectoral priority of reducing public health hazards and pollution has also been established and entails immediate action in the water, wastewater, solid waste and health care sectors.

16. **Bank Response and Strategy.** In response to the Government's request, the Bank provided assistance in the preparation of NERP and promised financial assistance for its support. The Bank also organized and chaired an Aid Coordination meeting in December 1991. The Bank is preparing a Country Economic Memorandum, and, in conjunction with the IMF, is assisting the Government in the design and implementation of a macroeconomic stabilization program. Additional assistance in mobilizing donor financial support would be furnished by the Bank, provided the Government agrees to and starts to implement a viable stabilization program acceptable to the Bank and the IMF. Subsequent Bank support would likely be in the social sectors (housing and education) and in selected infrastructure sectors (water, wastewater and electricity).

## II. DETAILED PROJECT DESCRIPTION

17. **The National Emergency Reconstruction Program.** The NERP is designed as a multi-sectoral operation focussed on emergency repairs and the rehabilitation of physical and social infrastructure. It aims to undertake, within a three and one-half year time span, a series of integrated measures designed to have maximum impact on restoring economic activity and alleviating social hardship. The NERP encompasses 15 sectors grouped in 5 components: infrastructure, the social sector, production, government buildings, and technical assistance.

18. The infrastructure component supports the rehabilitation and reconstruction of facilities in the following sectors: water and wastewater, solid waste, electricity, telecommunications, roads, ports and the airport. The social sector component supports the reconstruction and re-equipment of damaged facilities in education, health, social services and housing. The production component provides credit facilities to private sector activities (in agriculture) and finances the rehabilitation of public facilities in oil and gas. Technical assistance supports public sector capacity-building in various aspects of economic management and in the implementation of the NERP. The government buildings component supports the rehabilitation and re-equipment of key ministries and revenue-earning facilities. A summary description of the program components to be financed under the proposed Bank project is provided in the remaining sections of this chapter. A detailed description of each program component is provided in the project file.

19. **The Bank's Emergency Reconstruction and Rehabilitation Project.** The proposed ERRP supports the overall objectives of the Government's NERP. It aims to restore a basic level of functioning to infrastructure services, rebuild consumer confidence and create an environment in which essential institutional and financial reform is feasible. To ensure a reasonable impact on the NERP, the proposed ERRP is limited to five physical sectors: (i) water and wastewater (34 percent);

(ii) electricity (20 percent); (iii) solid waste (17 percent of the loan); (iv) education (9 percent); (v) housing finance (14 percent); and (vi) technical assistance (6 percent). The allocation of ERRP funds for these sectors takes into consideration their impact on economic and social conditions, their readiness for implementation, existing and expected cofinancing commitments and institutional arrangements for implementation and cost recovery.

20. The sectoral allocations of the ERRP listed in Table 1 are explained in the remaining sections of this report. In order to be able to adapt to changing circumstances and priorities, the ERRP is designed to permit a reallocation of funds within each sector and between sectors. Such reallocations would be decided at formal yearly reviews of implementation performance, to be carried out by World Bank staff and the Government.

## **WATER SUPPLY AND WASTEWATER**

21. **Background.** In 1982, virtually all dwellings in urban areas and 85 percent of the rural communities had clean, piped water supplied from public systems. The situation is different today: the water quality is unsatisfactory and causes widespread health hazards; all 18 existing water treatment plants have been damaged and are operated at reduced capacity, and only 10 percent of the chlorinators are functioning; and operation and maintenance suffer from inadequate organizational structures and a lack of skilled staff. The conditions of existing sewerage facilities are even worse than those for water supply. Wastewater from coastal communities is discharged directly along the shores and from inland communities into rivers and streams used for domestic water supplies by downstream communities.

22. **The National Emergency Reconstruction Program.** The overall objective of the NERP for water supply and wastewater is to reduce the detrimental health effects from the damaged water and wastewater systems and improve the level of service (to equal the pre-war standard). The NERP includes the following major components: (a) the execution of physical works, including equipment supply and installation and related engineering and construction supervision; (b) the preparation of a policy strategy paper for institutional and organizational development and of studies and action programs for subsequent implementation; and (c) the preparation of national development programs for water supply and wastewater and feasibility studies for investments that would take place in a subsequent phase. The above approach would provide for initial investments to be undertaken in emergency rehabilitation and reconstruction work along with the establishment of a foundation for medium- and long-term sector development. Based on the damage assessments for water supply and wastewater, the investment requirements for rehabilitation (including relevant technical assistance and consultant services) have been estimated at US\$298.3 million (including physical and price contingencies), comprising about US\$187.3 million for water supply and US\$111 million for wastewater. The direct and indirect foreign exchange requirements have been assessed at about 83 percent of total costs. Besides the Bank, the following agencies have expressed interest in the financing of the water supply and wastewater component of the NERP: the Kuwait Fund, the Arab Fund, the European Investment Bank (EIB), the European Community (EC) (already financing engineering services and project management) and UNDP (for technical assistance). It is envisaged that external financing can be secured for a total US\$250 million investment requirements. To ensure an integrated approach, the various contributions would be coordinated by the PMU and the SIUs.

23. **The Bank Emergency Reconstruction and Rehabilitation Project.** The overall objective of the Bank's ERRP is to reduce public health hazards through the protection of the supply sources and the reduction of water pollution caused by disfunctions of the sewerage system. The ERRP would cover country-wide rehabilitation works for the protection of water sources, water treatment and

disinfection, pumping and transmission and sewerage systems. The proposed ERRP loan for water and wastewater would amount to US\$60 million, with US\$44 million for water supply and US\$16 million for wastewater. The Bank loan would cover 100 percent of consultancy services and 85 percent of total costs for physical works, which would correspond to about 23 percent of estimated investment requirements. For water supply, this would cover equipment and material (62.3 percent of the total allocation), civil works (6.3 percent) and consultancy services (4.3 percent). For wastewater, corresponding percentages would amount to 22 percent, 3.3 percent, and 1.8 percent. (Table 2 provides a summary of costs for water and wastewater components to be financed with the Bank loan). Physical works included in the ERRP have been selected to satisfy the following priorities: the protection of surface and groundwater from actual and potential sources of pollution; the provision of adequate treatment and disinfection facilities to ensure water supplies of satisfactory quality; the rehabilitation (and, where justified, extension) of distribution systems to enable ready access to public water supplies; and the rehabilitation of sewerage networks to ensure satisfactory sanitary conditions in built-up areas and the rehabilitation or extension of sewage treatment facilities where urgently required for environmental reasons.

**24. Consultancy Services and Technical Assistance.** Technical assistance and consultancy services to be financed under the proposed ERRP for water supply and wastewater cover the preparation of engineering designs, including tender documents, and construction supervision for works to be implemented under the ERRP.

**25. Implementation.** Water supply and wastewater would be combined into one SIU, to be located in the Ministry of Hydraulic and Electric Resources (MHER). The MHER would play a major role in the implementation of the water supply and wastewater components of the NERP and, potentially, in the consolidation of the many water boards and other agencies that are, at present, involved in the water and wastewater sectors. It was agreed that procurement under the project would be done through the CDR to take advantage of its more expeditious procurement procedures. The respective involvement of the CDR and SIU in the procurement process has been discussed in detail and agreed to by the Government. (see para. 71 and Note 1 of this Annex).

**26. Timetable for Implementation.** Tender documents for works (including the supply and installation of equipment and material) to be undertaken during the first year of the NERP are scheduled to be completed by February 1993 when tender invitations would also be issued. The award of contracts would then be made by April/May, with construction works starting by mid-1993. For works to be covered in the subsequent two years, annual investment programs with related engineering design and tender documents would be prepared for review at least six months before the construction works were scheduled to commence. Figure 1 shows the proposed timetable in bar-chart form.

**27. Operation and Maintenance.** In order to ensure immediate improvements in operation and maintenance, the following actions have been agreed for incorporation in the tender documents: (a) contracts to be awarded for the rehabilitation and declogging of water distribution and sewerage systems would also be used for any upcoming emergency works (blockages, pipe bursts) that could not be handled by present organizations; and (b) suppliers of mechanical and electrical equipment would provide operational support for a year after commissioning and for staff training (the suppliers would subsequently be contracted for the provision of regular maintenance services and for keeping a stock of spare parts; if needed, this service would be extended to include full responsibility for both operation and maintenance). In order to improve billing and collection, the private sector would be involved, as appropriate.



28. Because of its fragmented sector structure, it has not been possible to review the financial and budgetary situation for wastewater. For water supply, based on a review of the budgets for seven water boards, the following was concluded: no provisions are made for debt service and/or for replacements of non-operable facilities; no payments are made for electricity costs; funds spent on operation and maintenance are inadequate and would at least have to be doubled, taking into account the dilapidated conditions of the assets; the rate of billing varies but is generally low—only about 22 percent of those connected in south Beirut are actually billed. Until the sector organizations have reached the stage of financial sustainability, the Government would continue to cover the recurrent costs.

### SOLID WASTE MANAGEMENT

29. **Background.** Solid waste management services were severely affected by the civil war in Lebanon. In all parts of the country, refuse collection equipment was either damaged through acts of war or deteriorated as the result of ageing and the lack of maintenance. This has resulted in the inability of authorities to collect the refuse generated by the urban populations; refuse is allowed to pile up in unseemly heaps along major roads or is dumped along the sea coast, leading to environmental degradation. Refuse collection and disposal is the responsibility of municipal authorities. However, the resource base of the municipalities has been eroded because of the civil war, and so municipalities depend on the central government for assistance both to cover the cost of services and to pay the salaries of their staff. They are unable to restore a reasonable level of service without help.

30. **The National Emergency Reconstruction Program.** The solid waste management component of the NERP is estimated to cost US\$81.2 million (including contingencies and land acquisition), of which US\$57.5 million equivalent is in foreign exchange. This NERP estimate includes the cost of (i) the acquisition of refuse containers and collection trucks for the whole country; (ii) the acquisition of land and the development of disposal sites and maintenance workshops to serve the whole country; (iii) the rehabilitation and utilization of the compost plant at Karantina and the recently completed incineration plant at Amrousiyeh; and (iv) technical assistance for engineering services and institutional development.

31. **The Bank Emergency Reconstruction Project (ERRP).** The objectives of the ERRP are to (i) prevent further environmental degradation resulting from the dumping of solid waste and to clean up the environment; (ii) replace the collection equipment that has been damaged or reached the limit of its useful life; (iii) create and operate suitable disposal sites; and (iv) strengthen the institutions that are responsible for waste collection and disposal, as well as for the maintenance of equipment. The project would assist the Government in developing the institutional structures that would lead to the improvement of service in the sector, better cost recovery and a more active role for the private sector.

32. The project would finance only the most essential parts of the NERP. The US\$30 million allocation would finance foreign exchange expenditures only. The cost of land acquisition for the disposal sites, estimated at US\$11 million, would be borne by the Government. The project would include (i) the repair of part of the existing fleet of compactor trucks in Greater Beirut (where this is viable); (ii) the procurement of 80 compactor/collector trucks and 2,760 containers, for country-wide distribution; (iii) the development of the priority areas for landfill, in order to prevent further dumping along the sea coast; (iv) the rehabilitation of the existing compost plant in the Karantina area of Beirut; (v) the construction of a road to the Amrousiyeh incinerator and the first year's operation

and maintenance of the Amrousiyeh incinerator and the Kasantina Compost Plant; and (vi) technical assistance for engineering services for design and construction supervision. The preparation of a long term strategy for solid waste management is being financed under the Technical Assistance component of the ERRP (see para 65).

33. In the development of disposal sites, priority would be given to the Cazas of (i) Koura, Tripoli, Batroun, Chouf, Jbeil, Kesrouane, Metn, Saida, Tyre and Beirut to prevent further dumping along the coast; (ii) Zahle, to protect its abundant water resources; and (iii) Baalbeck, to protect its rich cultural heritage. Table 3 provides a summary of costs for the solid waste component to be financed under the Bank loan.

34. **Timetable for Implementation.** Although the creation of sanitary landfills should be given top priority, their development cannot take place until land acquisition is completed. Therefore, the timetable has been designed to allow for completing the expropriation procedures which have been started. Figure 2 shows the proposed timetable in bar-chart form.

35. **Arrangements for Project Implementation.** Responsibility for solid waste management lies with the municipalities, or the Ministry of Environment. A Sector Implementation Unit (SIU) would be placed within the Ministry of Environment to carry out the implementation of the project, in coordination with the various municipal authorities and the various divisions of the CDR. It was agreed that procurement under the project would be done through the CDR to take advantage of its more expeditious procurement procedures. The respective involvement of the CDR and SIU in the procurement process has been discussed in detail and agreed to by the Government. (see para. 71 and Note 1 of this Annex).

36. Under the solid waste management component of the ERRP, technical assistance would be required (i) for the design of landfill sites and the preparation of tender documents; and (ii) the supervision of construction or implementation. The management of project implementation would be carried out by the SIU for solid waste. For the implementation of the ERRP only, a team composed of a senior mechanical engineer/team leader, a civil engineer for the landfills and workshops, a second civil engineer to handle the rehabilitation of the compost plant and support staff would be sufficient. If financing is assured for the remaining parts of the NERP, a second mechanical engineer and one more civil engineer would be required.

37. **Operation and Maintenance.** The project would finance about one third of the country's needs in collection equipment. As this represents only the replacement of damaged or aged equipment, the drivers, mechanics, technicians and laborers needed for operation and maintenance are already available at the municipal level. Furthermore, the amended rental law (which is the basis for the calculation of the municipal tax) and the increased overall economic activity would gradually increase the resources of municipalities. However, municipal authorities would need support in the immediate future to cover their recurrent expenditures in consumable spare parts and fuel. It has been agreed that (i) the ERRP would finance the first year's O&M costs for the Amrousiyeh incinerator and the Karantina Compost Plant; and (ii) all other expenditures would be recovered through direct charges to the beneficiaries.

## ELECTRICITY

38. **Background.** Power sector activities in Lebanon are vertically integrated under the responsibility of the state-owned *Electricité du Liban (EdL)*, except for: (i) the state-owned *Office National du Litani (ONL)* in charge of the Litani hydro scheme (191 MW); (ii) a few private generators, which operate small hydroelectric plants and sell bulk electricity to EdL; and (iii) two small distribution concessions at Jbeil and Zahle. The installed capacity of the system is about 1,600 MW, of which 268 MW is from hydro stations and 1,212 MW is from three thermal stations: Zouk, Jieh and Hraiche. The electricity system is interconnected at 150 kV and 66 kV and includes 58 HV substations with an installed transformer capacity of 1,620 MVA. Distribution is carried out at 35 kV, 15 kV, 11 kV and 5.5 kV, with an installed transformer capacity of about 1,600 MVA. However, the 15 years of war have caused widespread damage to the power facilities through destruction and the lack of maintenance. Many of the generating facilities are obsolete or in need of major repairs. Currently, only 500 to 600 MW are available, and electricity supply is restricted to about 6 hours per day. The transmission facilities suffered heavy damage during the war, and, at present, the system cannot be interconnected; the various power plants are only able to supply "pockets" of consumption. The distribution network has suffered heavily from the effects of the war, and the entire distribution grids of displaced villages have been destroyed.

39. **The National Emergency Reconstruction Program.** The investment needed for reconstructing the power sector is significant and would amount to over US\$800 million, including US\$300 million for new generating capacity and the adequate expansion of transmission and distribution facilities. However, in view of limited financial resources and implementation capacity, NERP of about US\$295 million has been prepared to cover the most urgent rehabilitation works for generation, transmission and distribution facilities. Works to be included in the NERP were selected to restore pre-war nominal capacity through repair and retrofitting, but not to provide new capacity. Priorities and criteria for the selection of work components have been established and include: restoring communication links with the dispatching center; increasing the capacity and availability of the existing generating stations; reconstructing the damaged transmission and distribution facilities; restoring public safety; and protecting the existing equipment from further damage. On completion of these works, it is estimated that service would improve significantly. However, the restored thermal generation capacity of about 1,150 MW would not be sufficient to meet the expected load with an adequate margin, and rationing may be needed at peak load.

40. **The Bank Emergency Reconstruction and Rehabilitation Project.** The objectives of the Bank-financed ERRP are: (i) to reconstruct and rehabilitate part of the war-damaged distributing facilities in the Greater Beirut area and to remove any deficiencies in existing facilities to enable their optimal use; and (ii) to reconstruct the distribution networks for destroyed villages to allow the return of the displaced population. The project would also assist the Government in the preparation of an appropriate regulatory framework which would attract private sector investments in the power sector (see para. 65).

41. While the financing of the electricity sector component of the NERP is provided in part by the Kuwait Fund and the Arab Fund (US\$110 million), Italy (US\$39.6 million) and France (US\$9.8 million), there is still a financing gap of about US\$135.6 million, excluding the Bank ERRP loan. The European Investment Bank is considering financing part of the program in distribution. The proposed ERRP would provide about US\$35 million to finance the foreign exchange cost of: (a) the most urgent rehabilitation works in part of the MV and LV network in the Greater Beirut area; (b) the MV and LV distribution networks and customer connections to restore the electricity supply in destroyed villages all over the country; (c) metering equipment; and (d) engineering and construction supervision for the above components. This would result in an improvement in the electricity supply

in the Greater Beirut area and would allow the return of displaced people to their villages throughout the country. The proposed Bank loan would finance 85 percent of the total cost of the electricity component. Table 4 provides a summary of costs for the electricity component of the ERRP.

**42. Timetable for Implementation.** To expedite the rehabilitation works in the power sector, an accelerated schedule has been decided by the Government, including the award of all the works of the electricity component of the NERP to a limited number of contractors. The prequalification of contractors for three packages (generation, transmission, distribution) was initiated on December 3, 1992, using World Bank sample documents for prequalification. Bidding documents have been issued. Contracts are expected to be awarded in May 1993 for the generation and transmission packages and in June 1993 for the distribution packages. As for the ERRP, tender documents for the Greater Beirut component are being prepared on a supply-and-erect basis to be issued by February 15, 1993 to prequalified bidders. For the displaced villages, the necessary detailed design studies need to be carried out in coordination with other infrastructure works to be implemented during the first year. Figure 3 shows the proposed timetable in bar-chart form.

**43. Arrangements for Project Implementation.** Responsibility for project implementation lies with the Sector Implementation Unit (SIU) for the overall NERP to be set up within the Ministry of Hydraulic and Electric Resources (reporting to the Minister). The SIU would include consultants, MHER and EdL staff. It was agreed, however, that procurement under the project would be done through the CDR to take advantage of its more expeditious procurement procedures. The respective involvement of the CDR and SIU in the procurement process has been discussed in detail and agreed to by the Government (see para. 71 and Note 1 of this Annex).

**44. Operation and Maintenance.** The operation and maintenance performance of EdL is closely related to its financial health and its ability to recruit and retain skilled staff. While the EdL financial situation cannot be accurately assessed, since the latest financial statements available are those of 1987, it appears that EdL is kept operating only through heavy government subsidies: EdL expenses for 1992 are estimated to be US\$170 million (of which US\$110 million is for fuel), compared to projected collections of US\$31 million. This is due to both inadequate tariffs and poor billing and collection performance. While in the 1970s, tariffs provided sufficient revenue for EdL, the recent devaluation of the Lebanese pound (LL 2.25 to the US\$ in 1975, compared to an average of LL 2,000 in 1992) caused significant increases in EdL operating costs: over this period the cost in LL of fuel oil for generation, all of which is imported, increased by a factor of 1,300. Salaries, although not maintaining their real value, increased 300- to 350-fold between 1982 and 1992. Tariffs have not kept pace with these increases; for example, in 1989 the domestic price of fuel oil was about \$0.005/kWh, compared to an economic cost of about \$0.08 to \$0.10. Although tariffs were increased 20- to 30-fold in January 1991, they are still not high enough to cover EdL costs. This shortfall is also partly caused by an inability to collect the revenues due to EdL. Because of widespread theft, illegal connections and poor billing and collections, it is estimated that EdL actually receives revenues for less than 50 per cent of the amount billed.

**45.** Since the new Government took office in November 1992, significant positive steps have been taken to improve the efficiency of EdL. The Government started to enforce collection measures and disconnect illegal consumers, and when the service is improved in 1993, tariffs will be increased. The present tariff of LL 55/kWh for all consumers will be raised to about LL 100/kWh for consumers with a monthly consumption of less than 200 kWh and to about LL 200/kWh for other consumers. Also, the Government will secure technical assistance to help EdL in critical areas of finance, management and operation. Further, the rehabilitation works of the NERP would be contracted in three or four major packages, which would include assistance for the operation of the rehabilitated assets.

## HOUSING

46. **Background.** The 17 years of hostilities exacerbated the condition of the housing sector with serious consequences for social stability and economic recovery. The effects of the hostilities were seen in: the reduction of stock through direct damage and the destruction of 170,000 units (25 percent of the housing stock in 1988); the displacement of 800,000 (22 percent of the population); the reduction in households' ability to afford adequate housing, as a consequence of the erosion of real income; the depletion of housing finance resources as a result of hyperinflation and severe losses in the foreign exchange value of the Lebanese pound; the severe shortages in the supply of new housing units for the middle- and lower-income groups; and the deterioration of the existing housing stock and associated services due to overutilization and the lack of maintenance.

47. The substantial decline in household real income levels that has occurred during the war eroded the capacity to make payments on short-term loans at current interest rates. Also, long-term housing finance resources - originally provided by insurance companies, social security funds, household savings and government budgetary allocations - were depleted as a result of hyperinflation and losses in the foreign exchange value of the Lebanese pound. Consequently, institutions providing long-term financing to lower- and middle-income groups have been unable to generate long-term financial resources on the local market to provide affordable loans to these groups.

48. Efforts to facilitate the rehabilitation of the damaged housing stock would greatly reduce social hardships and enhance the Government's action plan for the return of displaced families to their original homes. This plan is important to economic recovery, which relies heavily on the availability of a stable labor force throughout the national territory.

49. **The National Emergency Reconstruction Program.** The NERP allocates a total of US\$288.9 million for housing. This allocation contains US\$206.3 million to provide loans to initiate a substantial program of rehabilitation for approximately 55,000 damaged or destroyed dwellings, US\$66 million as public investment for the upgrading of long-standing informal housing areas, and US\$15 million for the resettlement program of the destroyed villages. The NERP also provides US\$1.6 million for technical assistance to the Ministries of Housing and Displaced Persons. Although no external funding commitments have been made, interest has been expressed by the Arab Fund for Economic and Social Development and the Saudi Fund for Development.

50. **The Emergency Reconstruction and Rehabilitation Project.** The Bank ERRP would provide a long-term loan (up to 15 years) of US\$25 million to initiate a housing finance scheme for the benefit of households whose housing conditions were seriously impaired as a result of the war. It is expected that at least an equal amount would be provided by other donors, either on a grant basis or on concessional terms, to reduce the cost of funds and make the loans affordable to households in the middle-income groups. The loan would help rehabilitate and rebuild the existing housing stock of households affected by the war and would, therefore, not necessarily directly benefit the poorest segments of the population. In any event, the latter group would not be in a position to afford the on-lending terms, and other government programs, such as the newly established Fund for the Displaced, which would allocate grants to the poorer segments of households displaced during the war, are expected to address their needs.

51. **The Beneficiaries.** The beneficiaries of the Housing Finance Scheme would be selected from among the households whose housing conditions were seriously impaired as a result of the war and who are considered creditworthy by the participating financial intermediaries, which would assume the credit risk on the sub-loans. In order to meet the Government's objective of encouraging the return of displaced families to their original home villages and towns, priority would be given to

displaced households. Beneficiaries targeted by the project would be primarily households who want to repair or rebuild their only and primary dwelling and those who choose to construct a new dwelling instead of rebuilding or repairing an original dwelling that has been destroyed. Renters and owners of apartment buildings could benefit from the scheme if they overcame the legal issues related to multi-ownership and rental agreements. Agreement was reached on detailed criteria for the selection of beneficiaries with a view to excluding the wealthy and those who own more than one house. Because income criteria are difficult to verify and apply, non-income criteria, such as the maximum area of the dwelling unit, and a ceiling on loan amounts would be adopted to facilitate targeting the middle-income households. The following criteria would be applied to determine the eligibility of applicants to borrow under the scheme:

- (i) **maximum area of the dwelling unit:** the habitable area should not exceed 125 square meters;
- (ii) **creditworthiness:** the applicant's creditworthiness would be assessed by the financial intermediaries on the basis of the following elements: income level of household; stability of income (stability of employment, quality of employer, salary domiciliation); disposable resources for down payment; availability of security other than the dwelling (cash or non-cash collateral by the beneficiary or by a third party);
- (iii) **social conditions of households:** once creditworthiness has been established under (ii) above, beneficiaries would be selected amongst the following categories listed by order of priority: (a) displaced from either owned or rented accommodation that has been damaged or destroyed; (b) living in damaged accommodation that is either owned or rented and willing either to repair the existing dwelling or to buy a new dwelling; (c) households formed during the war (after December 31, 1975) and presently sharing accommodation with another household in dwellings with a habitable area not exceeding 140 square meters; and (d) households formed after December 31, 1975 that do not own a dwelling and are living in legal, but temporary, accommodations.

52. **Implementation Arrangements and Procedures.** Bank funds would be lent to the Government and deposited at the Banque du Liban (BdL), Lebanon's Central Bank, which would administer them on the Government's behalf. Funds to be provided by donors other than the World Bank would also be managed by the BdL, which would determine the average cost of funds from the various donors and apply unified procedures for the disbursement and the recovery of funds from the beneficiaries. BdL would re-lend the funds to a number of financial intermediaries among those that have been appraised by IFC (see para. 53). The selected financial intermediaries would then on-lend the funds to beneficiaries, also in accordance with eligibility criteria agreed upon with the Bank (see para. 51) and pursuant to terms and conditions outlined below. In order to give preference to the displaced, the loans would be allocated to credit-worthy applicants listed under section 2 (iii) above in accordance with a system satisfactory to the Bank. It is estimated that the Bank loan would be used to finance expenditures of civil works contracts, goods and services related to the repair and the reconstruction of damaged dwellings, and the construction of new dwellings built either by the beneficiaries or by contractors. The construction industry for housing throughout the country is extremely competitive and materials are available from a wide range of suppliers.

53. The financial intermediaries would comprise commercial banks that were recently appraised by IFC for a credit line project of US\$40 million to be used for investment projects in the private sector. The participating banks (PBs) would be required to comply with the financial ratios of the Bank of International Settlements (BIS) guidelines, which would be imposed by BdL in 1993. The

following banks, which were appraised by IFC, are eligible to participate in the scheme: Banque Audi, Banque du Liban et d'Outre Mer, Fransabank, Bank of Beirut and the Arab Countries, Société Générale Libano Européenne de Banque, and Byblos Bank. The Housing Bank (HB) would be eligible to participate after it complies with the same financial criteria as the commercial banks and implements a restructuring plan that comprises recapitalization and institutional strengthening. Any PB would have the right to transfer under its own risk cover part or all of its loan portfolio to any other eligible PB, or to the Housing Bank once the latter has been restructured and is considered viable by the World Bank. The PBs would be required to enter into a subsidiary loan agreement (SLA) with the BdL. The SLA, to be satisfactory to the World Bank, would provide arrangements on sub-loan criteria (as described in paras. 52 to 56) but also on appraisal, supervision, procurement and disbursement procedures and reporting requirements to the BdL and the World Bank.

54. The loan amount to beneficiaries would be determined on the basis of loan-to-value ratios of 40 percent of property value for rehabilitation and 80 percent for reconstruction of owned or rented dwellings and the construction of new dwellings. To ensure targeting the middle-income groups, the loan amount would also be subject to a ceiling of an absolute amount of US\$40,000 for the repair, reconstruction or construction of new dwellings. Loans for the construction of new dwellings would not cover the price of land.

55. The lending instrument would consist of loans denominated in US dollars to be repaid over 5 or 15 years (up to 5 years for repairs and up to 15 years for reconstruction or the construction of new dwellings). The interest rate charged to the beneficiaries would be sufficient to recover the full cost of funds to the PBs including commercial risks and administrative costs. The interest rate would be adjustable to reflect the changes in the interest rate charged by the Bank and by other donors. The interest rate to be charged to the beneficiaries would be determined by the financial intermediaries, not to exceed 6 percent points above the average cost of funds to the PBs, to be determined by BdL. The interest rate would also be related to the creditworthiness of the beneficiary and to the loan repayment period.

56. Credit risks would be fully borne by the financial intermediaries, which would conduct full appraisal of loan applications on the basis of technical, financial and commercial feasibility. It was agreed that the financial intermediaries would assign all their rights and titles to the collateral obtained from the beneficiaries to BdL.

57. The World Bank funds would be disbursed only if additional funds are provided by other donors at concessional terms to reduce the average cost of funds to a level not exceeding 70 percent of the cost of the World Bank's funds. Such a reduction would make the loans affordable to the middle income households whose real earnings have been eroded by the war (see para. 47). Also, at the first annual review (expected in mid-1994) the Government and the World Bank will undertake a critical review of the progress of the housing component. If progress is deemed less than satisfactory - in terms of reaching the targeted beneficiaries or meaningful demand on loans - the funds allocated to the housing component would be either cancelled or reallocated to other components of the ERRP.

## **EDUCATION**

58. **Background.** Lebanon's well-educated population facilitated the development of a thriving service sector, which played a key role in the national economy before the war. Education facilities have suffered extensive damage and theft due to the war, and there is also considerable concern about the quality of teaching at all levels. The quality of education is very important as Lebanon has few

natural resources and must depend on human skills for recovery and sustained development. It is, therefore, an urgent priority to restore the capacity of the sector and enhance its capability. The dramatic fall in living standards is exerting pressure on the demand for places in public schools as the cost of private education becomes increasingly prohibitive. There are currently some 1,271 public schools in Lebanon, about 10 percent fewer than those existing in 1974. Damage to existing buildings and the loss of equipment severely constrains their potential capacity. Surveys during 1991 revealed that public schools for primary and secondary levels needed varying degrees of rehabilitation at an estimated cost of US\$45 million. Also, 18 out of the 22 vocational and technical training colleges operated by the public sector are severely damaged and non-operational. Rehabilitation and re-equipment costs are estimated to be US\$18.7 million.

59. **The National Emergency Reconstruction Program.** The NERP allocated US\$153.9 million for the rehabilitation of physical facilities, including US\$16.6 million for technical assistance. Priority is given to universal primary education and technical/vocational training, which can more rapidly benefit the economy. The aim is to: (i) rehabilitate public schools (primary and secondary levels) and rebuild 30 schools that were totally destroyed (US\$84.6 million); (ii) rehabilitate specific vocational and technical training colleges at an estimated cost of US\$18.7 million; (iii) rehabilitate the Lebanese University (US\$21.0 million); (iv) rehabilitate teacher training colleges (US\$13.0 million); and, (v) provide technical assistance to upgrade teacher training programs and strengthen the institutional capacity of the Ministries of National Education and Fine Art, Higher Education, and Technical Education and Vocational Training (US\$16.6 million).

60. Existing funding commitments for the NERP consist of: (a) US\$10 million from the Islamic Development Bank for the rehabilitation of the laboratory equipment in secondary schools; and (b) 8 million ECU (equivalent to US\$10.4 million) from the EC earmarked for the reconstruction of 30 schools (primary and secondary levels) that have been totally destroyed (though the estimated cost for this particular component amounts to US\$22 million).

61. **The Emergency Reconstruction and Rehabilitation Project.** The agreed ERRP would provide US\$15 million to finance the foreign exchange cost of: (a) the building rehabilitation works for the government-owned technical and vocational facilities located throughout the national territory (US\$8.1 million); (b) the repair and replacement of equipment for all the facilities to be rehabilitated (US\$1.1 million); (c) the preparation and production of new student textbooks and teacher guides, training seminars for personnel and strengthening the new Ministry of Technical Education and Vocational Training (US\$5.2 million); and (d) consultant services for the preparation of engineering studies, tender documents and the supervision of works (US\$0.6 million). The total cost of this component is estimated at US\$18.7 million, of which the Government would need to finance the equivalent of US\$3.7 million in local currency. Upon completion of the rehabilitation works, it is estimated that the number of students who would be trained in 17 different streams of skills that are needed for the national reconstruction effort would increase from the current 3,300 to about 10,700 per year. (see Table 5 and the Project Document File).

62. The location and configuration of the Vocational Training centers have been determined as satisfactory on the basis of a recent UNESCO study. The streams for which curricula and teaching material are to be prepared have been selected on the basis of an ILO study. However, both the final configuration of training centers and the skill streams would be finalized in the light of further work to be done during the early stages of project implementation, under Bank supervision. The cost estimates for the rehabilitation of buildings are based on damage assessments prepared by CDR consultants and reviewed by a locally recruited Bank consultant. These costs will be confirmed when detailed specification and tender documents are prepared by consultants to be financed by proceeds of the ERRP.



**63. Implementation Arrangements.** The building rehabilitation and associated consulting services (items (a) and (d) of para. 61) would be implemented by a Sector Implementation Unit (SIU) to be located in the Directorate of Buildings of the Ministry of Public Works, which is normally in charge of the construction of all government-owned buildings. The remaining parts related to the repair of equipment, preparation of training material, training seminars and strengthening of the Ministry of Technical Education and Vocational Training (MTEVT) (items (b) and (c) of para. 61) would be implemented by the MTEVT. The MTEVT and the SIU in the Ministry of Public Works would coordinate their work to ensure timely completion of civil works and the delivery of equipment (see Part III and Note 1 of this Annex).

### TECHNICAL ASSISTANCE

**64. Objective.** The technical assistance component is an important element of the proposed project as it provides a sound basis for starting to rebuild the public institutions that were severely affected by the war. It was assessed that the institutional capacity building objective is vital and would have an important positive effect on the sustainability of the investments to be financed under the ERRP. The purpose of the US\$10 million technical assistance (TA) component is to provide support to the central government to achieve the following objectives: (a) capacity building: to strengthen the capabilities of key institutions in economic management; (b) policy development: to design and implement sectoral policies; and (c) institutional and regulatory reforms: to prepare and implement part of the Government's restructuring program for the infrastructure sectors; to prepare strategies and an action plan; and to strengthen the institutional and regulatory framework for the sector in which the public utilities services operate. Agreement was reached on the targeted priority areas: the Ministry of Finance, telecommunications, electricity, water and solid waste. Terms of reference were prepared and agreed for most of the subprojects and are included in the project file.

**65. Description.** The TA would accomplish these objectives through funding to support the following priority activities:

- (a) **Ministry of Finance:** US\$0.4 million would finance a program to enhance revenue collection and strengthen economic and financial management.
- (b) **Telecommunications sector (US\$6.65 million) :**
  - (i) US\$1.5 million in consulting services to assist in restructuring the sector with a view to commercialize telecommunications services. This would include separating the operation and maintenance of telecommunications from the Ministry and creating an independent joint-stock company; assessing alternatives for private sector participation; and preparing a new regulatory framework; and
  - (ii) US\$5.15 million to finance a management contract with an experienced, private telecommunications utility operator. This utility would help improve the management of the Ministry operation, facilitate the efficient rehabilitation of existing assets, improve operations and maintenance and help introduce a privatization scheme.

**(c) Power sector (US\$2.5 million):**

- (i) US\$0.25 million to finance a long-term consultant, for a period of two years, to assist the Minister of Hydraulic and Electric Resources in rehabilitating, restructuring and developing the power sector;**
- (ii) US\$1.85 million to finance a technical assistance contract with an experienced international electric utility operator to assist the Ministry and EdL. Assistance is required in various functions including MIS, finance, accounting, billing collection, human resources development and training. This assistance would improve the management of the operation and would facilitate the efficient rehabilitation of assets, improve operations and maintenance and train EdL staff; and**
- (iii) US\$0.4 million in consulting services to: (a) define a long-term strategy for the efficient development of the sector with both public as well as private participation; (b) articulate options to restructure the sector, taking into account the experience in countries that have undergone power sector reforms but keeping in mind specific Lebanese conditions; (c) define the regulatory framework that would provide an independent and transparent regulation of the power sector while attracting foreign and private capital; and (d) promote environmentally sound operations.**

**(d) Solid Waste and Wastewater: US\$0.2 million in consulting services would cover a study to recommend a long-term strategy for solid waste management and identify measures for the development of efficient solid waste management services.**

**(e) Water sector: US\$0.25 million would finance a long-term consultant for a period of two years to assist the Minister of Hydraulic and Electric Resources in reorganizing and restructuring the water sector.**

**66. Cost and Financing.** The cost of the TA to be financed by the project is estimated at US\$10 million (see Table 6). The TA would finance 100 percent of the following costs: (a) consultant services, either international or local firms or individuals recruited in accordance with the Bank's Guidelines; and (b) the procurement of equipment, e.g., computer hardware and software for use by government staff in the context of services provided by the consultants.

### **III. INSTITUTIONAL ARRANGEMENTS AND PROJECT IMPLEMENTATION**

**67.** The NERP and the ERRP would be implemented over a three-year period by the CDR and existing sector ministries and agencies. The institutional arrangements for implementation are based on the general principle that the CDR is responsible for program management, whereas the line ministries and agencies are responsible for program implementation. As an exception to that general principle, the CDR would also be responsible for the implementation of projects not specifically allocated to a line ministry or agency. Such "special projects" are projects that are cross-sectoral and go outside the boundaries of ministries, are "orphan" projects, or are projects with special circumstances that the Council of Ministers wishes the CDR to implement. Also, in order to take advantage of its simpler and less time-consuming procedures, the CDR would be in charge of procurement, payments and disbursements for the NERP and the proposed World Bank loan. Detailed implementation arrangements, including the distribution of responsibilities between the CDR and ministries and agencies, are presented in the attached Note 1.

68. Seventeen years of war have severely damaged public administration, which has suffered a loss of trained capable people. Unfortunately, those civil servants who have remained are often struggling to survive on inadequate salaries and have little or no opportunity to renew or modernize their skills. The Government is aiming at achieving sustainable improvement in public sector institutions over the long term; it has also devised a short-term strategy to increase immediately the implementation capacity of public administration. In order to implement the NERP and the ERRP effectively and efficiently, the CDR and sector ministries and agencies would be strengthened with the establishment of a Program Management Unit (PMU) within the CDR and Sectoral Implementation Units (SIUs) within the relevant ministries and agencies. The teams of consultants recruited to staff these units would be integrated within the existing structures; they would set up appropriate methods, work organization and management procedures for the implementation of the program and also provide on-the-job training to the local staff affiliated with these units. There would be eight SIUs for the NERP, as follows:

- (a) Water Supply and Wastewater: SIU within the Ministry of Hydraulic and Electric Resources
- (b) Electricity: SIU within the Ministry of Hydraulic and Electric Resources
- (c) Solid Waste: SIU within the Ministry of Environment
- (d) Telecommunications: SIU within the Ministry of Post and Telecommunications
- (e) Public buildings (including schools) and roads: SIU within the Ministry of Public Works
- (f) Finance: SIU within the Ministry of Finance
- (g) Ports and Airports: SIU within the Ministry of Transport
- (h) Other SIU for productive sectors: within CDR

69. In order to ensure proper coordination, the CDR would establish an advisory body, called the Technical Coordination Committee (TCC), consisting of senior members of the SIUs and PMU and a representative from the EC. Sectoral planning for project and contract execution would be a key coordination focus.

70. The PMU of the CDR would include 20 consultants working within the 4 divisions of CDR (e.g., Program, Project Management, Finance and Administration). The 8 SIUs would include 44 consultants. For the three-year implementation period, the cost of the PMU and SIUs, including equipment and operating costs and 10 percent contingencies, but excluding the Lebanese Government's contribution (assigned staff, offices, etc.), is estimated at US\$14.9 million equivalent for the PMU and US\$40.7 million equivalent for the nine SIUs. Most of these costs would be financed by the EC.

71. **Procurement.** It was agreed that procurement under the project would be handled by the CDR. The reasons for adopting this procedure are (i) the cumbersome and time-consuming procurement procedures under standard government regulations; (ii) the streamlined procedures applicable to procurement by the CDR; and (iii) the economies of scale that can be achieved through bulk procurement. Procurement methods for works, goods and services to be financed under the proposed loan are summarized in Schedule B of the MOP. Because of the urgent nature of the

project, part of the procurement would be undertaken using simplified competitive bidding procedures in accordance with Bank Guidelines. A procurement notice advertising the project has been published in the United Nations' Development Business, and the CDR has published the same notice in the local press and has distributed it to embassies represented in Beirut. Detailed procurement arrangements are set out in the attached Note 2.

72. **Disbursements.** Given the emergency nature of the proposed project, the implementation period would be 36 months, and the Bank loan would be disbursed over 40 months. The additional four months have been provided to allow for the completion of disbursements. Schedule B in the Memorandum of the President shows the estimated loan disbursements by semester.

73. The proposed Bank loan of US\$175 million equivalent would be disbursed against the categories and at rates stated below:

- (1) Civil Works: 90 percent prior to July 1, 1994; 60 percent from July 1, 1994 to June 30, 1995; and 30 percent thereafter
- (2) Equipment and materials: 100 of foreign expenditures; 100 percent of local expenditures (ex-factory cost); and, 80 percent of local expenditures for items procured locally
- (3) Consultants' services: 100 percent
- (4) Sub-loans for housing: 100 percent

74. Full documentation would be submitted to the World Bank in support of withdrawal applications with respect to civil works, materials, equipment, consultant services and the sub loan for expenditures in excess of US\$50,000 equivalent. Expenditures for these categories at or below US\$50,000 equivalent would be reimbursed against Statements of Expenditure (SOEs), for which the related documentation would be retained for review by World Bank supervision missions.

75. **Retroactive Financing.** In view of the emergency nature of the social service requirements, the infrastructure works and the strained foreign exchange position of the Government, retroactive financing up to US\$13.0 million from the proceeds of the World Bank loan is proposed for expenditures incurred after appraisal but before loan signing, comprising funds for consultants services (engineering designs and preparation of tender documents) and urgent civil works in the solid waste incinerator and the compost plant in Beirut.

76. **Special Account.** In order to facilitate rapid disbursements, the Government will establish two Special Accounts, one to be operated by CDR, the other by BdL, under terms and conditions satisfactory to the World Bank. An initial deposit of US\$13.0 million in the case of CDR and of US\$2.0 million in the case of BdL would be made to the respective Special Accounts. Both CDR and BdL would maintain the Special Accounts as a separate identifiable account for the project's expenditures and retain all supporting documentation for subsequent review by the World Bank supervision missions. CDR and BdL would also provide the World Bank with a monthly statement of their respective Special Accounts. On, at least, a monthly basis or when one half of the initial deposit has been utilized, CDR or BdL would submit a replenishment request to the World Bank with the necessary supporting documentation for funds withdrawn from their respective Special Accounts.

77. **Accounts and Audits.** CDR is the designated representative of the Borrower for withdrawing the proceeds of the World Bank loan, except in respect of the housing component where BdL is the

designated representative. CDR and BdL would each keep separate accounts for project expenditures in accordance with accounting principles and practices acceptable to the World Bank. These accounts and the two Special Accounts would be audited annually by an independent auditor acceptable to the Bank, and copies of the audited statements would be forwarded to the Bank within six months of the end of the CDR fiscal year.

78. **Supervision Plan.** Project supervision would be the responsibility of the Project Task Manager, who would be assisted by specialists for the sectoral components. A project-launch mission would be fielded after Board approval (say April, 1993) to ensure that arrangements for project implementation, including those for procurement and disbursements, were in place and were satisfactory to the Bank. The proposed mission is needed because the Lebanese Government and its implementing agencies have not dealt with the Bank for nearly a decade, and, therefore, Bank procedures need to be explained and understood to avoid delays in disbursements. The proposed mission would consist of the Task Manager and advisors on procurement and disbursement. Participating donors would also be invited to take part. In the period between appraisal and Board presentation, limited supervision would be required to review and clear bidding documents and terms of reference of consultants to expedite implementation.

79. From May 1993 to November 1994, supervision missions would visit Lebanon at four-month intervals. By November 1994, the mid-term review would require an expanded mission consisting of the Task Manager, a sector specialist for each component and a financial analyst. Donors would be asked to participate in the mid-term review mission. Subsequently, supervision missions consisting of the Task Manager and one or two specialists would visit Lebanon every six months. About 10 staff weeks would be needed for the project launch mission in FY93; 30 staff weeks would be needed during FY94 for supervision; 35 staff weeks, during FY95; and 25 staff weeks, during FY96. The cost of supervision would be reduced by using the services of local consultants.

### AGREEMENTS REACHED

80. During negotiations, agreement was reached with the Government on the following actions:

- (a) A yearly review to be held not later than September 30 of each year until completion of the project to assess progress achieved in project implementation.
- (b) Budget allocations to be provided for the recurrent costs that could not be covered through internal cash generation.
- (c) Operation and maintenance services to be contracted to private sector firms wherever a ministry or public agency was institutionally incapable of adequately performing these tasks.
- (d) Government to submit by December 31, 1993, an action plan to improve cost recovery in the power, water, wastewater and solid waste sectors to generate sufficient revenue to fund operations, maintenance and recurrent costs.

81. As a condition of the disbursement of each component of the loan (except housing), the Government would establish the corresponding SIU with staffing and terms of reference acceptable to the Bank, or put in place such alternative implementation arrangement as shall be satisfactory to the Bank. Funds for the housing component of the loan will be disbursed only after the following conditions are satisfied: (i) the Government obtains additional funds from other donors at

**concessionary terms which, when pooled with the Bank funds will reduce the average cost of funds to the participating banks to a level not exceeding 70 percent of the cost of the Bank funds; and (ii) BdL has concluded participating agreements acceptable to the Bank, with at least three financial intermediaries.**

**LEBANESE REPUBLIC**

**EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT**

**Implementation Arrangements**

1. **General.** The NERP and the ERRP would be implemented over a three-year period by the CDR and existing sector ministries and agencies. The institutional arrangements for implementation are based on the general principle that the CDR is responsible for program management whereas the line ministries and agencies are responsible for program implementation. As an exception to that general principle, the CDR would also be responsible for the implementation of projects not specifically allocated to a line ministry or agency. Such "special projects" are projects that are cross-sectoral and go outside the boundaries of ministries, "orphan" projects, or projects with special circumstances, which the Council of Ministers wishes the CDR to implement. Also, in order to take advantage of its simpler and less time-consuming procedures, the CDR would be in charge of contracting, payments and disbursements for the NERP and the ERRP.
2. **Overall Program Management by CDR.** The CDR is entrusted with the overall responsibility for the implementation of the NERP. Its organization structure consists of four divisions: Program, Project Management, Finance, and Administration. These divisions (59 professionals) do not have adequate experience nor enough competence to cope with the implementation (monitoring, management and coordination) of this program. Moreover, they do not have at their disposal adequate methods and management tools for the efficient monitoring of the program, or for handling the workload resulting from the implementation of the program. Therefore, they would be strengthened with a team of experienced consultants. This team of consultants, together with CDR divisions, would be the PMU for the NERP and ERRP.
3. **The main responsibilities of the PMU would be the following:**
  - (a) Overall planning, programming and budgeting
  - (b) Coordination of sectoral planning proposals by sector ministries
  - (c) Allocations between sectors and the identification of priority projects
  - (d) The mobilization of funds to finance approved programs
  - (e) Contracting for civil works, goods and services (drafting the general conditions part of the bidding documents in consultation with line ministries and agencies; calling for bids; organizing and chairing the tender evaluation committee, with the participation of line ministries and agencies; and signing contracts)
  - (f) Payments to suppliers and contractors upon receipt of appropriate documentation from line ministries and agencies
  - (g) Disbursements of loans and grants obtained to finance the program (including the proposed World Bank loan) and of the government counterpart contributions and the management of any special account that may be established
  - (h) Facilitating the implementation of the projects by line ministries and agencies (for example, by making available to them specialized expertise on a short-term basis)

- (i) The implementation of "special projects" (storm water drainage, the airport, ports, and other productive sectors)
- (j) Overall program monitoring (including maintaining a program implementation schedule and an expenditure forecast and control system) and reports to the Council of Ministers and donors on the progress of the program

4. The PMU would be constituted from four divisions of the CDR by drawing on their permanent staff and on the consultants providing assistance to their divisions. All resident consultants would be integrated in CDR divisions and would report to the relevant division heads. The team leader would be responsible for the quality of the work performed by the consultants, and for the coordination between consultants and division heads. The four divisions heads and the team leader would constitute a permanent task force in charge of the coordination of work between divisions; it would identify and solve problems caused by any administrative bottlenecks that might adversely affect the performance of the PMU. This task force would report directly to the President of the CDR.

5. The team of consultants would be recruited under a contract with a single firm. They would carry out the following tasks:

- (a) Setting appropriate methods, work organization and management procedures for the implementation of the program, including the implementation of a management information system and of a reporting framework
- (b) Participating directly in CDR work, to help the four divisions perform their duties efficiently and to provide on-the-job training to their personnel
- (c) Assisting the heads of divisions and departments in the planning of operations and the assignment of tasks amongst their teams
- (d) Contributing to the streamlining of the work of the CDR divisions
- (e) Compensating for any shortage of expertise within these four divisions

6. In the light of needs identified in the various CDR divisions, the composition of the team of consultants would be the following:

- (a) One team leader
- (b) Seven consultants appointed to the Program Division (one economist, three planning/programming specialists, one social sector specialist, one project identification specialist and one appraisal specialist)
- (c) Six consultants appointed to the Project Management Division (two public contract specialists and four specialized engineers)
- (d) Six consultants appointed to the Finance Division (one expatriate specialist in international contracts or tenders and five local consultants - one financial analyst, three university graduate accountants, and one computer specialist)
- (e) One international law specialist appointed to the Administrative Division

7. **Program Implementation.** Program implementation would be the responsibility of the SIUs in sector ministries and agencies and, in exceptional cases, in the CDR. These SIUs would be entrusted with the management and supervision of the implementation of sectoral programs as well as with institutional support to these sectors.



8. The SIUs would be responsible for the following tasks:
- (a) Proposals for sectoral planning, including the preparation of master plans, feasibility studies for specific projects and the preparatory work for the appointment of consultants
  - (b) Supervision of the preparation of detailed engineering and tender documents and contract packaging
  - (c) The management of consultants (for master plans, feasibility studies, engineering, project supervision, operation and maintenance, institutional development, etc.)
  - (d) All the technical aspects of the procurement of goods and services (prequalification, technical specifications to be included in the tender documents and participation in the preparation of tender documents and in tender evaluation)
  - (e) The monitoring of contract and project supervision (including schedules and cost control, project accounts and progress) and the preparation of the necessary documentation for submission to the CDR for payments to contractors and suppliers under the various loans and grants. On this basis, the CDR would be responsible for the actual payment of funds under the World Bank loan, the government cash counterpart contribution and other participating donor funds, according to each institution's disbursement guidelines
  - (f) Periodic reporting to the CDR and others
  - (g) The management of studies and actions required for organizational and institutional development, proper operation and maintenance and adequate cost recovery
9. The SIUs would have full responsibility and accountability for the technically related project features; for contract administration, they would have a delegation of authority from the CDR (the employer) to act as "maître d'oeuvre délégué" in accordance with procedures that would be spelled out in detail.
10. Eight priority SIUs have been identified:
- (a) Water Supply and Wastewater: SIU within the Ministry of Hydraulic and Electric Resources
  - (b) Electricity: SIU within the Ministry of Hydraulic and Electric Resources
  - (c) Solid Waste: SIU within the Ministry of Environment
  - (d) Telecommunications: SIU within the Ministry of Post and Telecommunications
  - (e) Public Works (public buildings and roads): SIU within the Ministry of Public Works
  - (f) Finance: SIU within the Ministry of Finance
  - (g) Ports and Airports: SIU within the Ministry of Transport
  - (h) SIU for other productive sectors: within CDR
11. For Telecommunications, the role of the SIU would be management only (technical support may not be required), and for Finance the role of the SIU would be essentially for diagnosis, institutional support and coordination (including assistance in various areas of economic management and in the design and implementation of a social safety net). For all other SIUs, the main tasks to be performed by the teams of consultants would be the following:
- (a) Preparing and putting into operation the technical supervision of sectoral programs and projects and directly performing SIU activities in coordination with civil administration employees affiliated with the SIU

- (b) Providing technical support in all matters relating to management, operation and maintenance activities in the institutions they belong to and on-the-job training of civil administration employees affiliated with the SIU
- (c) Preparing periodic reports to the Directorate General of the ministry to which they are affiliated, the CDR and other concerned authorities

12. The SIUs would report directly to the Director General of the institution they belong to, and the SIU located in the CDR would report to the head of the Project Management Division in the CDR. Each SIU would include a team of consultants, plus an equivalent number of staff from the related ministry or agency and one representative from the CDR, all of them working under the authority of the leader of the team of consultants. SIUs would consist of a relatively small number of consultants since separate consultants would be employed and managed by the SIUs to carry out some of the tasks (for example, project design and field supervision) for which the SIUs are responsible. It is estimated that for the 8 SIUs, a total of 44 expatriate consultants would be required, as detailed below.

a.	Water Supply and Wastewater	8
b.	Electricity	10
c.	Solid Waste	4
d.	Telecommunications	4
e.	Public Works	5
f.	Finance	4
g.	Ports and Airports	6
h.	Other Productive Sectors	3
	<b>TOTAL</b>	<b>44</b>

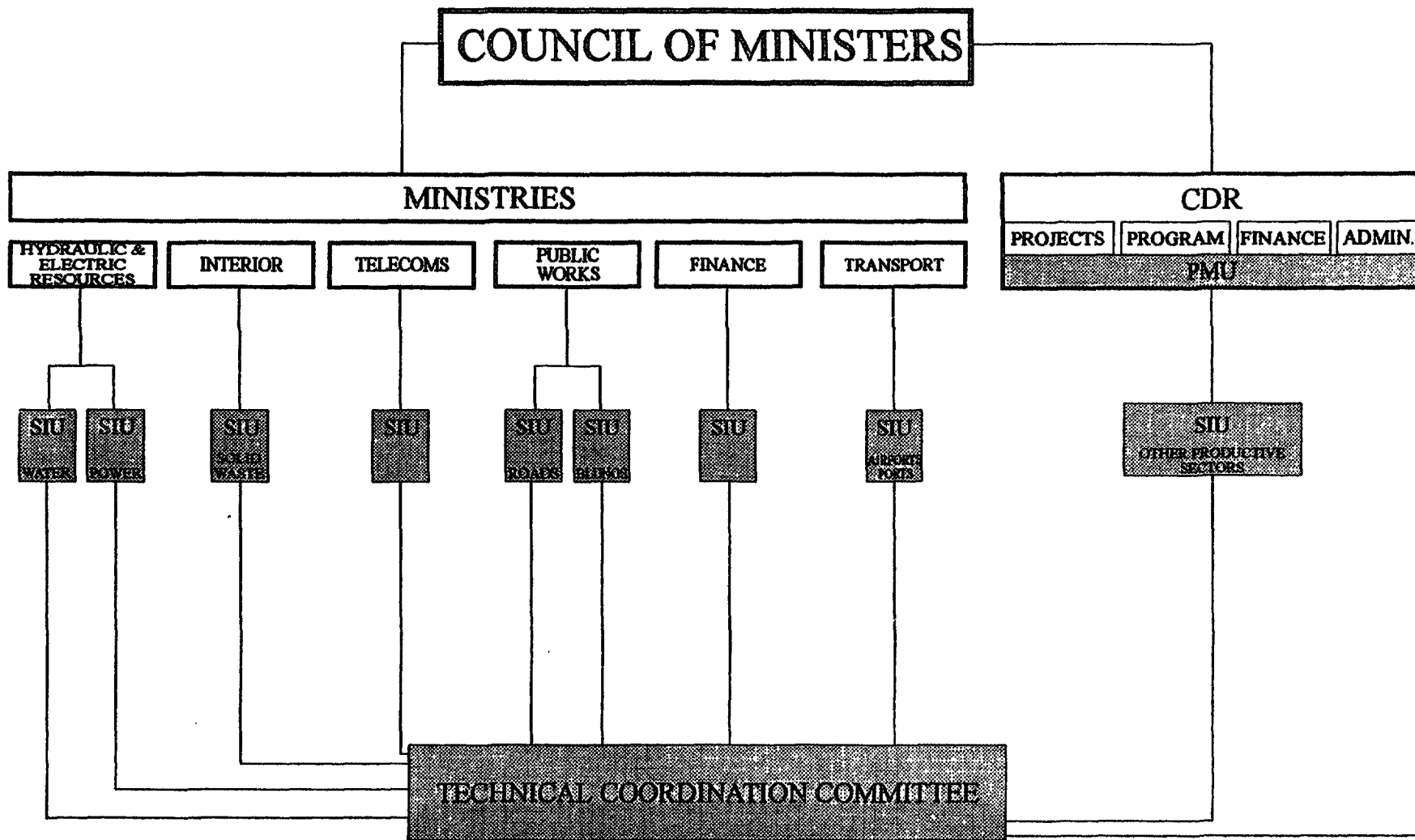
13. For the three and one half year implementation period, the costs of the PMU and SIUs, including equipment and operating costs, but excluding the Lebanese Government's contribution (assigned staff, offices, etc.), are estimated at US\$14.9 million equivalent for the PMU and US\$40.7 million equivalent for the 9 SIUs.

14. **Coordination.** Good coordination between the PMU and the SIUs is essential for the successful implementation of the NERP. In order to ensure proper coordination, the CDR would establish an advisory body, called the Technical Coordination Committee (TCC), consisting of high-level members of the SIUs and the PMU and a representative from the EC. Sectoral planning for project and contract execution would be a key coordination focus. At the beginning, the TCC would have to meet weekly, but later on meetings would not have to be as frequent. Minutes of meetings and recommendations of the TCC would be transmitted to the President of the CDR and to the relevant Director General. More specifically, the main tasks of the TCC would be to:

- (a) Harmonize common procedures
- (b) Identify possible bottlenecks, namely administrative ones, and formulate adequate solutions
- (c) Coordinate the progress and phasing of sectoral projects that might interfere with other sectoral programs

- (d) Establish progress reports of works in various sectors, including recommendations for changes in sectoral programs, if necessary
- (e) Evaluate and harmonize the strengthening of institutional actions in various sectors

15. The arrangements for program management and implementation are summarized in the chart presented on the following page.



## **LEBANESE REPUBLIC**

### **EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT**

#### Procurement Procedures

1. The Procurement Notice advertising the ERRP was published in the December 31, 1992 edition of the UN Development Business. The CDR has published the notice in the local press and has provided copies to all governments represented in Beirut. Because of the emergency nature of the project, no further international advertising of the project would be required, except for equipment and materials for the water and wastewater, solid waste and electricity components. Items to be procured under Local Competitive Bidding (LCB), i.e., civil works for the solid waste component, would be advertised locally. Procurement packages have been agreed and sized as large as feasibly possible to help ensure economies in the procurement exercise.
2. It has been agreed that all procurement would be in accordance with the Bank's Guidelines and that the Bank's Sample Bidding Documents would be used for all contracts including those covered under local competitive bidding. Prior to Board presentation, formal administrative procedures would be agreed to be followed by the CDR and the SIUs in the preparation, bidding, evaluation and award of contracts financed by the Bank.

#### INTERNATIONAL COMPETITIVE BIDDING (ICB)

3. **Supply-and-Install Contracts.** The Bank-financed contracts for the supply-and-install contracts for equipment and materials for the water and wastewater and electricity components (total amount US\$75.0 million) would be procured through ICB procedures acceptable to the Bank. The works covered by these contracts are required by the Government to be completed as soon as possible. CDR consultants would be appointed and financed by the EC (for detailed design and construction supervision of the first year of the water and wastewater and electricity components) as extensions of existing EC-financed contracts because of the urgency of the assignment. Consultants, under Bank's Guidelines, would be appointed during 1993 for the detailed design and construction supervision of the remainder of the works for these two components. These consultants would prepare bidding documents based on the World Bank Sample Bidding Documents for the procurement of works, which should permit Bank review to be expedited. Because the completion of these components is urgently needed, the bidding period would be reduced to 60 days. This period would begin immediately after the issuance of the procurement notification that bidding documents were available. The notification would be delivered to all member governments represented in Beirut and sent by telex to those contractors who were prequalified and suppliers who registered an interest in response to the above-mentioned advertisement. The CDR would arrange to courier copies of the bidding documents to interested companies. The award of any contract would be subject to the post-qualification of the supplier. Criteria for this post-qualification would be included in the bid documents.
4. **Goods, Equipment and Materials.** With the exception of the equipment (US\$20.3 million) for the solid waste component, and the materials (US\$6.1 million) for the education component, the packages to be provided under Bank financing are relatively small (spare parts would be provided under the above supply-and-install contracts). Those with values in excess of \$0.5 million would be procured through ICB in accordance with Bank's guidelines and would account for about US\$22.0 million.

### LOCAL COMPETITIVE BIDDING (LCB)

5. **Civil Works and Building Contracts.** LCB would be largely associated with the construction of the 13 landfill and transfer stations (total amount \$12.8 million) for the solid waste component and the construction of 3 schools and the rehabilitation of 16 others (total amount \$11.0 million) for the education component. For efficiency, the contracts would be packaged into a maximum of three solid waste components and two school components. Even with this packaging, it is unlikely that foreign contractors would be interested in bidding because of the dispersed nature of the sites, the relatively small amount of each of the contracts and the nature of the work. Contractors who respond to the initial notice (para. 1) would be prequalified by the CDR, and all prequalified contractors would be invited to bid.

### INTERNATIONAL SHOPPING

6. International shopping may be used for the procurement of equipment and materials financed from the proceeds of the proposed loan. Procurement for lots with values of less than US\$500,000 may be done by international shopping. For international shopping, no formal bidding documents are required; however, the Bank would be informed of the shortlist of suppliers who would be approached for quotations (these shall be at least three in number and from at least two eligible countries). The aggregate total of procurement via international shopping for the ERRP may not exceed \$2.0 million.

### LIMITED INTERNATIONAL BIDDING (LIB)

7. **Replacement and Spare Parts.** The procurement of about \$2.2 million worth of parts for specialized equipment (such as pumps, generators and transformers) would be made through LIB, which would be open to all known suppliers who have responded to the above-mentioned advertisement. It may be necessary to award some contracts directly through negotiated contracts with the original suppliers of the equipment.

### REVIEW BY THE BANK

8. Prior review by the Bank of bidding documents, shortlists of bidders and recommendations for awards would be required for all packages estimated to be worth more than US\$250,000. The estimated percentage of procurement subject to the Bank's prior review would be more than 95 percent.

### EVALUATION OF BIDS

9. Invitations to bid would request CIF delivery to one of the four international ports in Lebanon - the actual choice of port being left to the bidder. Bid prices would include the cost to the port of choice and transportation to the site or store where the equipment or materials are to be used.

### CONSULTANTS

10. Consultants contracts, which are to be financed from the proceeds of the loan, are estimated to cost about US\$16.7 million. With the exception of the consultants for the first year of the detailed design and construction supervision for the electricity, water and wastewater components (para. 3), consultants

would be selected in accordance with the "Guidelines for the Use of Consultants by the World Bank Borrowers and by the World Bank as Executing Agency." All Bank-financed consultancy contracts would be subject to prior Bank review.

**LEBANESE REPUBLIC**  
**EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)**  
**BANK-FINANCED SECTORS**

(US\$ million)

Bank-Financed Sectors	ERRP				NERP		
	Local Cost	Foreign Cost	Total Cost	Bank Financing	Local Cost	Foreign Cost	Total Cost
Electricity	6.2	35.0	41.2	35.0	17.5	267.4	294.9
Water Supply	7.0	43.8	50.8	43.8	33.3	154.0	187.3
Waste Water	3.5	16.2	19.7	16.2	19.5	91.5	111.0
Solid Waste	15.0	30.0	45.0	30.0	23.7	57.5	81.2
Education	3.7	15.0	18.7	15.0	25.0	128.9	153.9
Housing	13.5	25.0	38.5	25.0	66.6	222.3	288.9
Technical Assistance	1.7	8.3	10.0	10.0	3.0	109.3	112.3
Other sectors	-	-	-	-	141.2	878.1	1,019.3
<b>Total</b>	<b>50.6</b>	<b>173.3</b>	<b>223.9</b>	<b>175.0</b>	<b>339.8</b>	<b>1,909.0</b>	<b>2,248.8</b>

03-Feb-93

ERRP costs include price and physical contingencies

NERP = National Emergency Reconstruction Program



**LEBANESE REPUBLIC**  
**EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)**  
**Water Supply & Waste Water Components**

**Summary of Costs**  
**(US\$ million)**

Item No.	Subproject and Component	LOCAL	FOREIGN	TOTAL	Percent Foreign	Percent of Base Cost
<b>1.</b>	<b>Water Supply</b>					
1.1	Equipment & Material	1.3	33.1	34.4 a/	96.2	55.9
1.2	Civil Works	4.7	3.4	8.1 a/	42.0	13.2
1.3	Consultancies	0.0	2.6	2.6	100.0	4.2
	Sub-total	6.0	39.1	45.1	86.7	73.3
<b>2.</b>	<b>Waste Water</b>					
2.1	Equipment & Material	0.5	10.6	11.1 a/	95.5	18.0
2.2	Civil Works	2.6	1.6	4.2 a/	38.1	6.8
2.3	Consultancies	0.0	1.1	1.1	100.0	1.8
	Sub-total	3.1	13.3	16.4	81.1	26.7
	Total Base Cost	9.1	52.4	61.5	85.2	100.0
<b>3.</b>	<b>Contingencies</b>					
3.1	Contingencies for Water Supply	1.0	4.7	5.7	82.5	9.3
3.2	Contingencies for Waste Water	0.4	2.9	3.3	87.9	5.4
	Total Contingencies	1.4	7.6	9.0	84.4	14.6
	<b>TOTAL</b>	<b>10.5</b>	<b>60.0</b>	<b>70.5</b>	<b>85.1</b>	<b>114.6</b>

02-Feb-93

Note: a/ These contracts will be awarded on the basis of supply and install, i.e., supply of equipment, materials and civil works combined in one contract.

**LEBANESE REPUBLIC**  
**EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)**  
**Solid Waste Management Component**

**Summary of Costs**

(US\$ million)

Item No.	Subproject and Component	LOCAL	FOREIGN	TOTAL	Percent Foreign	Percent of Base Cost
<b>1.</b>	<b>Sanitary Landfills</b>					
1.1	Land Acquisition	11.0	0.0	11.0	0.0	27.7
1.2	Development of New Sites	1.2	5.6	6.8	82.4	17.1
1.3	Closure of Old Dumps	0.4	1.0	1.4	71.4	3.5
1.4	Buildings and Workshops	0.9	2.2	3.1	71.0	7.8
	Sub-total	13.5	8.8	22.3	39.5	56.1
<b>2.</b>	<b>Collection Equipment</b>					
2.1	Compactor Trucks	0.0	8.0	8.0	100.0	20.1
2.3	Containers	0.2	0.6	0.8	75.0	2.0
	Sub-total	0.2	8.6	8.8	97.7	22.1
<b>3.</b>	<b>Compost Plants</b>					
3.1	Rehabilitation of Karantina Compost Plant	0.3	2.5	2.8	89.3	7.0
3.2	O & M Karantina and Amrousiyeh	0.0	5.0	5.0	100.0	12.6
	Sub-total	0.3	7.5	7.8	96.2	19.6
<b>4.</b>	<b>Technical Assistance</b>					
4.1	Engineering Services	0.0	0.9	0.9	100.0	2.3
	Sub-total	0.0	0.9	0.9	100.0	2.3
	<b>Total Base Cost</b>	<b>14.0</b>	<b>25.8</b>	<b>39.8</b>	<b>64.8</b>	<b>100.0</b>
<b>5.</b>	<b>Contingencies</b>					
5.1	Physical Contingencies	0.2	1.2	1.4	85.7	3.5
5.2	Price Contingencies	0.8	3.0	3.8	78.9	9.6
	<b>Total Contingencies</b>	<b>1.0</b>	<b>4.2</b>	<b>5.2</b>	<b>80.8</b>	<b>13.1</b>
	<b>TOTAL</b>	<b>15.0</b>	<b>30.0</b>	<b>45.0</b>	<b>66.7</b>	<b>113.1</b>

**LEBANESE REPUBLIC  
EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)  
Electricity Component**

**Summary of Costs  
(US\$ million)**

Item No.	Subproject and Component	LOCAL	FOREIGN	TOTAL	Percent Foreign	Percent of Base Cost
<b>1.</b>	<b>Greater Beirut Distrib.</b>					
1.1	Medium Voltage	2.69	15.21	17.90	85.0	51.5
1.2	Low Voltage	1.84	10.34	12.18	84.9	35.1
	Sub-total	4.53	25.55	30.08	84.9	86.6
<b>2.</b>	<b>Displaced Villages</b>					
2.1	Distribution	0.52	2.97	3.49	85.1	10.0
	Sub-total	0.52	2.97	3.49	85.1	10.0
<b>3.</b>	<b>Metering Equipment</b>					
3.1	HV Substations	0.02	0.14	0.16	87.5	0.5
	Sub-total	0.02	0.14	0.16	87.5	0.5
<b>4.</b>	<b>Consultant Services</b>					
	Sub-total	0.15	0.85	1.00	85.0	2.9
	Sub-total	0.15	0.85	1.00	85.0	2.9
	Total Base Cost	5.22	29.51	34.73	85.0	100.0
<b>5.</b>	<b>Contingencies</b>					
5.1	Physical Contingencies	0.51	2.88	3.39	85.0	9.8
5.2	Price Contingencies	0.45	2.61	3.06	85.3	8.8
	Total Contingencies	0.96	5.49	6.45	85.1	18.6
	<b>TOTAL</b>	<b>6.18</b>	<b>35.00</b>	<b>41.18</b>	<b>85.0</b>	<b>118.6</b>

**LEBANESE REPUBLIC  
EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)  
Education Component**

**Summary of Costs  
(US\$ million)**

Item No.	Subproject and Component	LOCAL	FOREIGN	TOTAL	Percent Foreign	Percent of Base Cost
<b>1.</b>	<b>Building Rehabilitation</b>					
1.1	Civil Works	2.50	7.80	10.30	75.7	58.4
	Sub-total	2.50	7.80	10.30	75.7	58.4
<b>2.</b>	<b>Equipment</b>					
2.1	Equipment & materials	0.00	1.00	1.00	100.0	5.7
	Sub-total	0.00	1.00	1.00	100.0	5.7
<b>3.</b>	<b>Production of Teaching Material</b>					
		0.75	5.00	5.75	87.0	32.6
	Sub-total	0.75	5.00	5.75	87.0	32.6
<b>4.</b>	<b>Engineering Services</b>					
		0.00	0.60	0.60	100.0	3.4
	Sub-total	0.00	0.60	0.60	100.0	3.4
	<b>Total Base Cost</b>	<b>3.25</b>	<b>14.40</b>	<b>17.65</b>	<b>81.6</b>	<b>100.0</b>
<b>5</b>	<b>Contingencies</b>					
5.1	Physical Contingencies	0.25	0.30	0.55	54.5	3.1
5.2	Price Contingencies	0.20	0.30	0.50	60.0	2.8
	Total Contingencies	0.45	0.60	1.05	57.1	5.9
	<b>TOTAL</b>	<b>3.70</b>	<b>15.00</b>	<b>18.70</b>	<b>80.2</b>	<b>105.9</b>

This component covers the rehabilitation of vocational schools:

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4 in Greater Beirut; 3 in Mount Lebanon; 4 in North Lebanon; 4 in Bekaa; and 4 in South Lebanon

**LEBANESE REPUBLIC**  
**EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT (ERRP)**  
**Technical Assistance**

**Summary of Costs**  
**(US\$ million)**

Item No.	Subproject and Component	LOCAL	FOREIGN	TOTAL	Percent Foreign	Bank Financing Percent
<b>1.</b>	<b>Ministry of Finance</b>					
1.1	Consultancies	0.08	0.32	0.40	80.0	100.0
	Sub-total	0.08	0.32	0.40	80.0	100.0
<b>2.</b>	<b>Telecommunication</b>					
2.1	Restructuring Study	0.15	1.35	1.50	90.0	100.0
2.2	Management Contract	1.03	4.12	5.15	80.0	100.0
	Sub-total	1.18	5.47	6.65	82.3	100.0
<b>3.</b>	<b>Power</b>					
3.1	Long Term Consultant	0.00	0.25	0.25	100.0	100.0
3.2	Technical Assistance Contract	0.37	1.48	1.85	80.0	100.0
3.3	Restructuring Study	0.04	0.36	0.40	90.0	100.0
	Sub-total	0.41	2.09	2.50	83.6	100.0
<b>4.</b>	<b>Solid Waste</b>					
4.1	Study and Long Term Strategy	0.02	0.18	0.20	90.0	100.0
	Sub-total	0.02	0.18	0.20	90.0	100.0
<b>5.</b>	<b>Water Sector</b>					
5.1	Long Term Consultant	0.00	0.25	0.25	100.0	100.0
	Sub-total	0.00	0.25	0.25	100.0	100.0
	<b>TOTAL</b>	<b>1.69</b>	<b>8.31</b>	<b>10.00</b>	<b>83.1</b>	<b>100.0</b>

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**LEBANESE REPUBLIC**

**EMERGENCY RECONSTRUCTION AND REHABILITATION PROJECT**

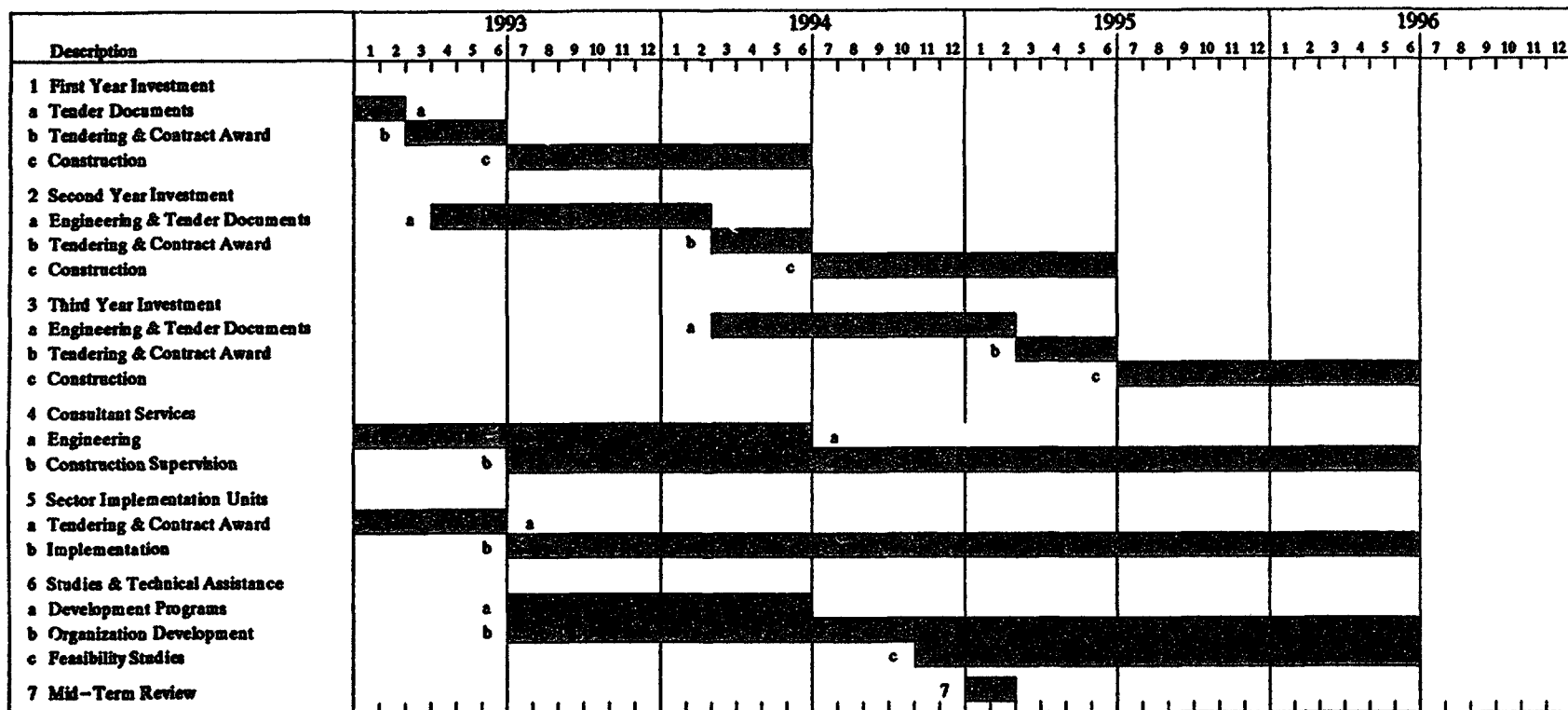
**List of Project Documents Available in Project File**

**Detailed Project Description**

**Water and Wastewater  
Solid Waste  
Electricity  
Education  
Housing  
Technical Assistance**

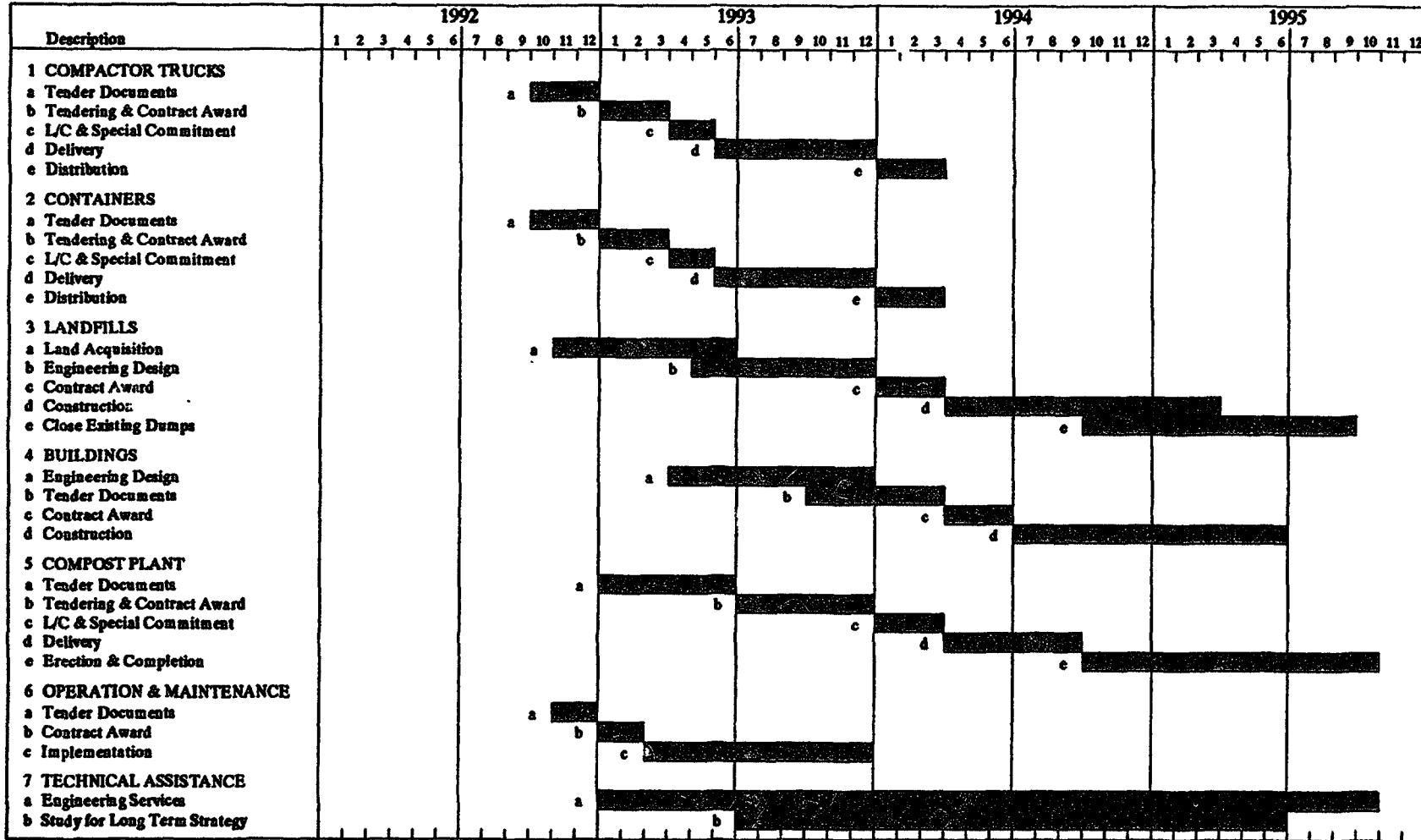
**Government and Bank Report on the Three-Year National Emergency Reconstruction Program**

**LEBANESE REPUBLIC  
EMERGENCY RECONSTRUCTION & REHABILITATION PROJECT (ERRP)  
PROJECT IMPLEMENTATION SCHEDULE  
WATER SUPPLY & WASTE WATER COMPONENTS**



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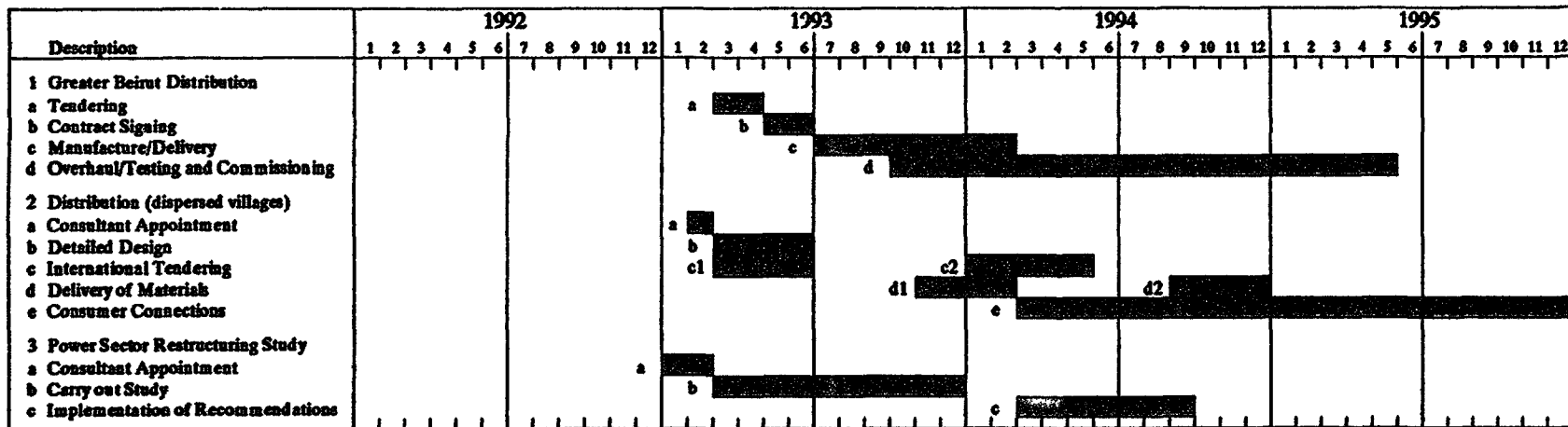
**LEBANESE REPUBLIC**  
**EMERGENCY RECONSTRUCTION & REHABILITATION PROJECT (ERRP)**  
**PROJECT IMPLEMENTATION SCHEDULE**  
**SOLID WASTE MANAGEMENT COMPONENT**



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**LEBANESE REPUBLIC  
EMERGENCY RECONSTRUCTION & REHABILITATION PROJECT (ERRP)  
PROJECT IMPLEMENTATION SCHEDULE  
ELECTRICITY COMPONENT**



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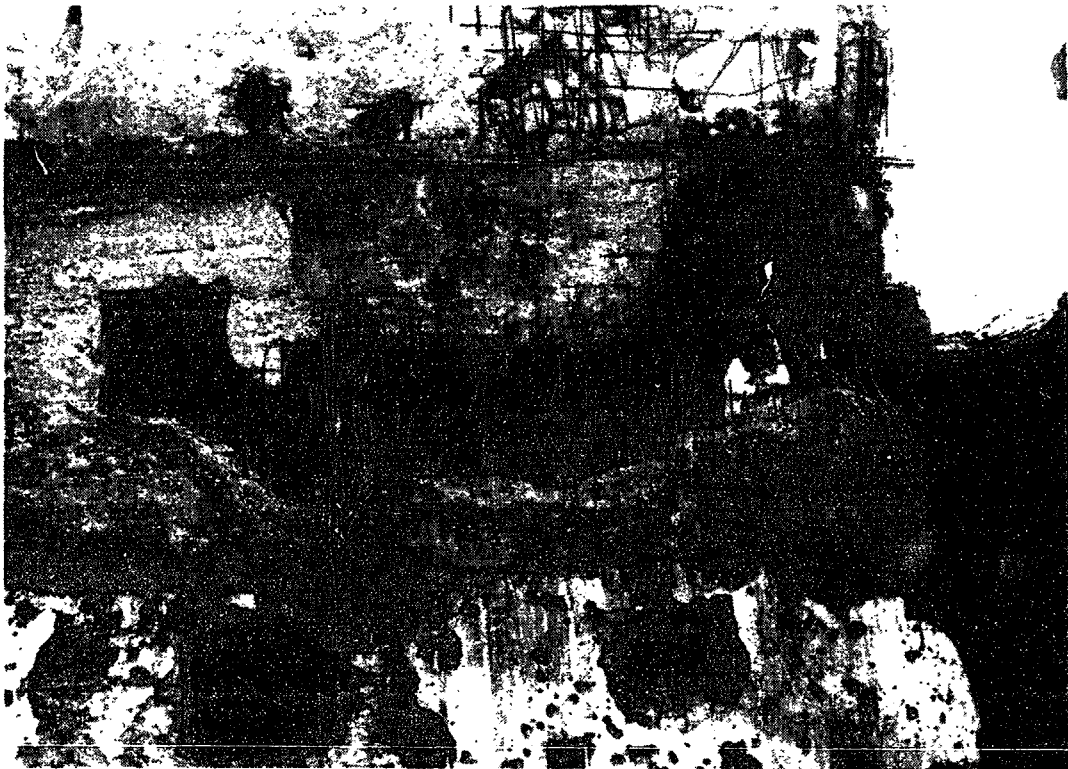
Beirut: A view of Central Business District (CBD)



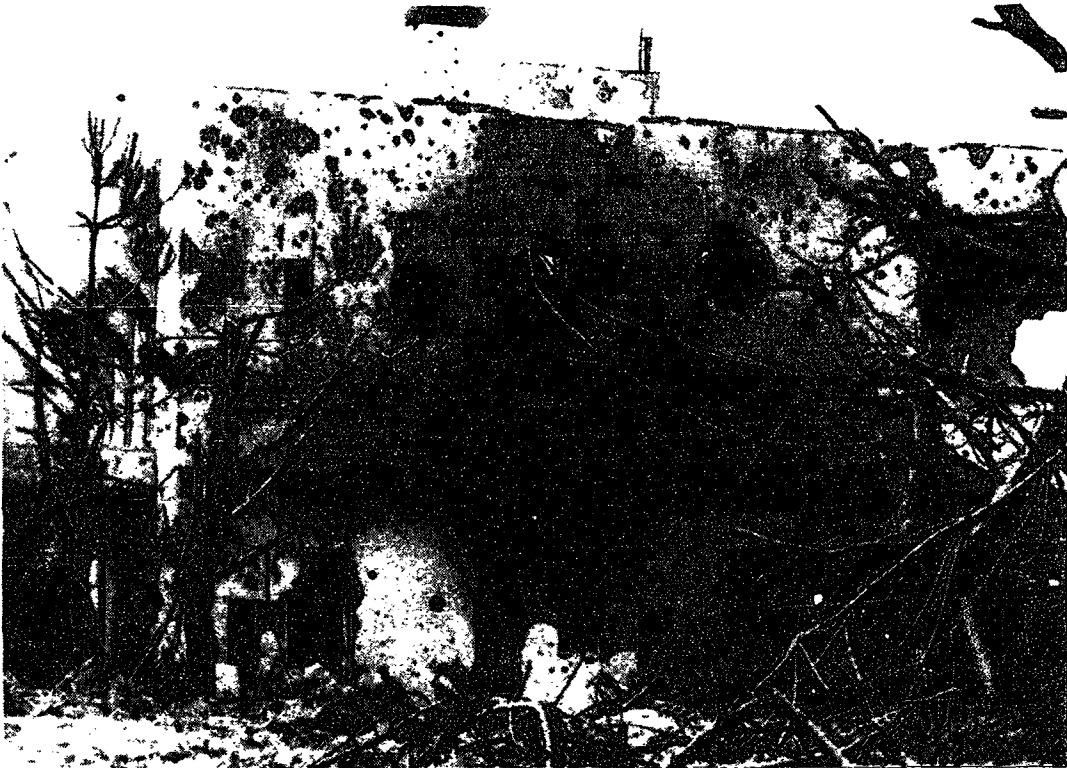
Beirut: International Banking District at CBD



Beirut: Residential Building



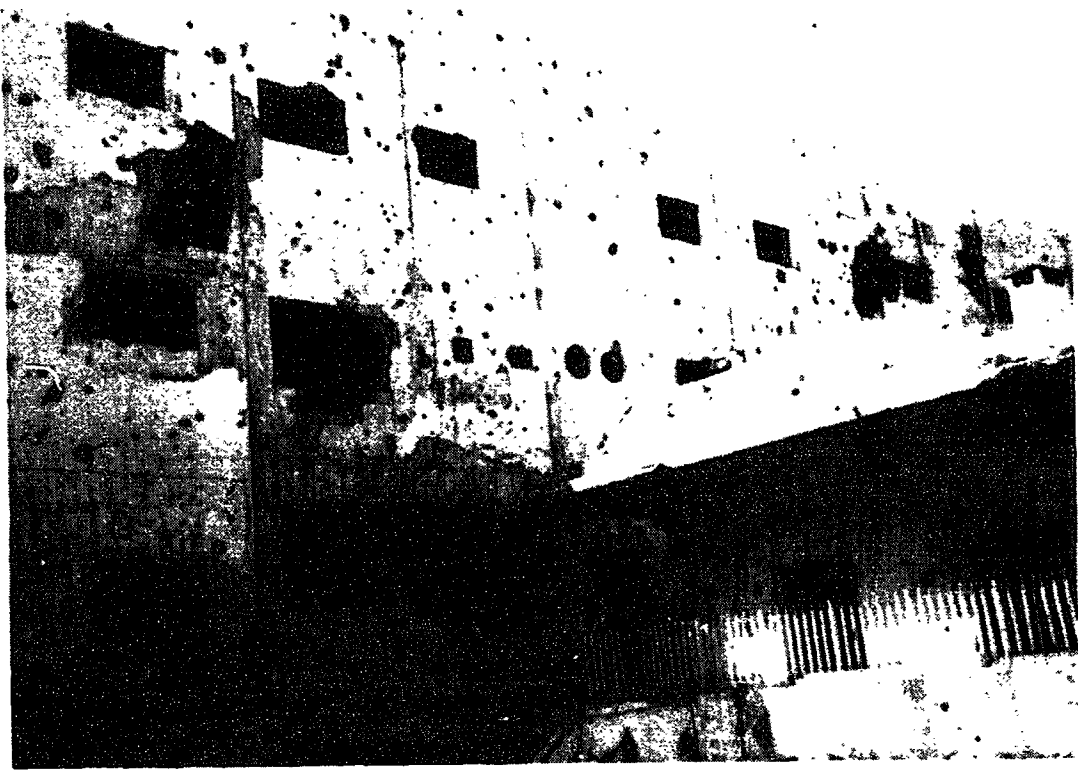
Beirut: Residential Building



**Caza Aley: Residential Building**



**Caza Aley: Commercial and Hotel District**



Beirut: General view of Quarantine Hospital



Beirut: Damage to Quarantine Hospital



**Saida: Damaged Saida Secondary School**



**Choueyfat: Damaged classroom at Choueyfat University**

**MAP SECTION**