

#### Republic of Lebanon

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

The Lebanese Republic

The High Relief Committee in collaboration with The United Nations Development Programme

Post-Conflict Socio-Economic Rehabilitation Programme for South Lebanon

# REGIONAL SOCIO-ECONOMIC DEVELOPMENT PROGRAMME FOR SOUTH LEBANON :

The Project, Placing and Execution

July 1999

Report prepared by:
Institute of Urban Planning of the Region of Ile-de-France (IAURIF), Paris
TEAM International - Beirut
Consultation and Research Institute (CRI), Beirut
ECODIT, Washington
PRDU, University of York



اكترب والمناطق

Cover photo: SPOT Satellite image of South Lebanon in July 1997 In red: Agricultural areas and forests

# TABLE OF CONTENTS

SUMMARY	4
INTRODUCTION	9
A. OFFICIAL STATEMENT: A region heavily affected by the conflict	14
A1. The people	14
A2. The territory	23
A3. Water resources	32
A4. Economic activities	<b>3</b> 6
A5. Infrastructure and facilities	45
A6. Synthesis of the conflict's impact	51
B. THE POTENTIAL: Strengths and weaknesses facing the development of South Lebanon	52
B1. The human potential	52
B2. The potential of agricultural development	56
B3. The potential of touristic development	62
B4. The potential of industrial and commercial development	68
B5. The strengths, weaknesses, opportunities, and constraints: synthesis	71
C. THE PROJECT: Objectives, priorities, and main axis of the regional development programme_	72
C1. The objectives and priorities of the development programme	72
C2. Support to economic development	75
C3. The rehabilitation of the environment, the sites, and the environment of life	88
C4. Physical reconstruction and infrastructure development	94
C5. The rehabilitation of human resources	106
C6. The rehabilitation of the administrative staff	111
C7. The mobilization of means and actions of promotion	115
D. PHASING: The regional development programme in 2 phases	118
D1. The probable evolution of the situation during the following years	118
D2. Phase I: persistence of the conflict	126
D3. Indications for the specific programme during the period of withdrawal	132
D4. Indications for the Phase 2 programme of consolidation and post-conflict	132
E. EXECUTION	137
E1. The institutional arrangements	137
E2. Resource mobilization and the search for partnerships	149
E3. Follow-up and evaluation of the development programme	154
APPENDICES: Tables, project team, contributing institutions, acknowledgements	155



# GLOSSARY

#### Acronyms and abbreviations

CAS	Central Administration of Statistics
SLA	South Lebanon Army
CDR	Council for Development and
	Reconstruction
CERD	Center for Educational Research and
	Development
CS	Council for the South
EDL	Electricity of Lebanon (National Company
	of Electricity)
FAO	Food and Agriculture Organization
UNIFIL	United Nations Interim Force in Lebanon
HRC	High Relief Committee
IDAL	Investment and Development Authority of
	Lebanon
LP	Lebanese pound
META	Mediterranean Environmental Technical
	Assistance Programme
ME	Ministry of Environment
NGO	Non-Governmental Organization
NOL	National Office of Litany Water
OUN	Organization of the United Nations
SMO	Small and Medium Organization(s)
SMI	Small and Medium Industries
UNDP	United Nations Development Programme
US\$ or \$	US dollars

#### Units

All financial figures are in US dollar (US\$) value of January 1999

The conversion rate of the Lebanese pound to the US dollar is: US\$1=LP1,500

### PREFACE

#### Institutional framework of report

Convinced that social support and emergency assistance should join in a long-term development strategy, the Lebanese Government decided, at the end of 1997, to launch a strategy for regional socio-economic development for the terrritory affected by the conflict in South Lebanon.

The strategy was officially launched on the November 14, 1997, by the Lebanese government, represented by the High Relief Committee, and in collaboration with the United Nations Development Programme (UNDP), and a group of bilateral donors. The strategy consists of a technical assistance project to prepare for a post-conflict socio-economic rehabilitation programme for South Lebanon.

This two-year project was co-financed by the Lebanese government (19%), the UNDP (38%), the Netherlands (31%), the Arab Gulf Programme for United Nations Development Organizations (8%), and Ireland (4%). The UNDP guaranteed all bilateral funding.

The preparatory technical assistance project consisted of two phases:

- a) an experimentation in real-size socio-economic micro-projects in South Lebanon, in partnership with NGOs, cooperatives, local associations, municipalities, and local governance organizations. This phase was completed between November 14, 1997, and September 30, 1998.
- b) the formulation of a regional socio-economic development programme for South Lebanon in coordination with the principal local and national participants: this phase was launched on August 18, 1998, and is presented in this report.

The main objectives of the first phase (micro-projects) were:

- to financially support a group of carefully identified economic and social development initiatives targeting the most deprived social categories or those who have suffered the most from the consequences of the conflict;
- to evaluate the capacity of governmental organizations and NGOs to formulate and implement coherent developmental projects;
- to demonstrate the government's capacity to implement developmental projects in partnership with local participants;
- to derive lessons learned and methods useful in the formulation of an economic and social developmental strategy for South Lebanon.

The major objectives of the second phase (formulation of the regional programme use) are:

- the formulation of a coherent vision and an integrated developmental strategy for South Lebanon;
- the orientation and rationalization of the Lebanese government's efforts to develop this region in view of increasing funding efficiency supported by donors and private investors;
- the presentation of a positive image of the future for South Lebanon, replacing the present view marked by military conflict, with the aim of increasing the interest of institutional partners and investors in this region.

This report presents the framework of the second phase of the technical assistance project.



#### SUMMARY: REGIONAL SOCIO-ECONOMIC DEVELOPMENT PROGRAMME FOR SOUTH LEBANON JULY 1999

outh Lebanon has been heavily affected by 30 years of conflict. The area possesses important potentials for development: the availability of water, sites of touristic value, resourcefull and dynamic inhabitants, and a geographic location that could offer the region a promising future once the conflict is over. What matters today is to preserve this potential and to operate a transition between the policies of emergency assistance and those of development. This would permit, as soon as the conflict ends, an initiation of ambitious projects, including the return of the displaced, as an answer to the reconstruction challenges and in order to consolidate the post-conflict situation with socio-economic progress.

Report done on behalf of the Lebanese Government represented by the High Relief Committee, in collaboration with the United Nations Development Programme.

Consultants: IAURIF, TEAM International, CRI, ECODIT, PRDU.

#### South Lebanon today

The five cazas most affected by military conflict and Israeli occupation have about 270,000 inhabitants, of whom 70,000, or 22%, are in the occupied zone (excluding military forces and the population increase during summer). 70% reside in the non-occupied area.

The inhabitants of the two zones live under precarious economic conditions: activities related to the conflict, along with grants provided to the war victims, represent about one third of the total household income of this region. Other activities include small-scale non-irrigated agricultural production and services.

A quarter of the households have a monthly income of less than US\$300 for an average family of 4.8 persons. Adding to the level of poverty in the region are social problems directly related to the conflict for groups including the displaced, orphans, disabled, prisoners, and ex-prisoners.

The territory displays marks of conflict, in particular the region separating the occupied zone from the non-occupied area: many minefields, vast burned fields, and deserted terrain and buildings.

This region of Lebanon had already been less equipped compared to other areas of the country and public infrastructure has suffered major losses. The Lebanese Government has undertaken efforts to provide urgent reparations and maintenance of public networks and launched developmental infrastructure projects for Tyre and Nabatiyeh, mainly focusing on drinking water and sanitation.

Still, South Lebanon remains one of the regions that lack adequate provision for collective public services.

# Strengths, weaknesses, opportunities, and challenges

South Lebanon possesses important potentials for development, mainly founded on four major principals:

- the population which is numerous, young, and sustained by a large and successful diaspora abroad;
- the territory including important urban centers (Tyre and Nabatiyeh), a road axis linking it to Beirut and regional networks, and the relatively elevated cost of land and fertile agricultural areas;
- the water resources where developmental projects of the Litani River can have an exceptional effect on economical and social dynamics in this region;
- the historical and archeological sites and areas of natural beauty which offer potential for development of tourism.

South Lebanon can also seize numerous opportunities for development, in particular:

- the mobilization of important investments at the end of the conflict;
- the capacity for partially seizing the regional agricultural production, constrained in most of the neighboring countries by the lack of water resources;
- the capacity to attract some of the expected increase in tourism to the Near East.

Yet, South Lebanon should overcome a series of weaknesses, in particular those related to human resources (poor qualifications, poverty, illiteracy, conditions of women, persistent variances), the image linking it to the conflict, the weak presence of the State and its services, the mined zones, the structural weaknesses of the agriculture sector (fragmentation, tobacco tradition cultivation, lack of respect for veterinary norms, etc), and the absence of adequate infrastructure for industry and tourism.

South Lebanon will also have to face important challenges that can threaten the

prospects for development at the end of the conflict. These challenges include:

- the necessity of creating thousands of jobs in order to face the return of a significant population of displaced people, and to accommodate persons who used to live on the war economy and related activities;
- the necessity of rapidly constructing infrastructure to handle the return of the displaced and to attract investors and middle-class residents to the region;
- the improvement of standards for agricultural products, to ensure competitiveness in the market.
- the identification of possible tourist sites and projects and ensuring these meet required quality specifications.

#### The objectives

Three large objectives have been assigned to this programme:

- An objective of prosperity: to give South Lebanon the capacity to assume a sectoral economic plan and to progress in a social plan addressing the situation of the most deprived;
- An objective of security: to assure and reinforce civil peace, guarantee the security of people and possessions, specifically in relation to the danger of mine fields, and to ensure the return of the State to service the inhabitants of the region;
- An objective of national integration: to reinforce the national integration of South Lebanon, and ensure an adequate level of services equivalent to that of other regions.

These objectives cannot be fully achieved unless Lebanon recovers its territorial integrity, but they can be actively prepared for.

The Lebanese Government has identified a set of priorities that should guide this programme which are:

- the struggle against poverty;
- the reinforcement of a civil society;
- the improvement of the conditions of women;

- the encouragement of private-sector initiative:
- the preservation of the environment and natural resources.

#### The content

Six major complementary intervention axes have been defined. Each of these refers to specific modalities and partnerships:

- 1. the economical development, oriented towards job creation in the services and industry sectors and towards the modernization of agriculture, with a priority granted to the creation of enterprises and to private investments;
- 2. the rehabilitation of the environment, the sites, and the way of life, essential for both economic and social development;
- 3. the development of infrastructure and services, in particular water networks and sanitation, refurbishing of schools and residential buildings;
- 4. the rehabilitation of human resources including training and practical experience;
- 5. the rehabilitation of the administrative framework through acceleration of efforts managed on the national level in order to improve the efficiency of services provided by the State and municipalities;
- 6. the mobilization of assets, investments, and public and private partners, and the economical promotion of South Lebanon.

Each of these axes covers on average about fifteen identified and assessed lines of action.

The few actions listed below illustrate the content of the programme:

- The setting-up of a financial resource center supporting the creation of enterprises, managing loans, and promoting investments in the South;
- A human resource center assuring the management of training and supplying a placement service for job seekers to different enterprises;
- Pilot projects in the agricultural domain and food industry;

- Regulatory measures and investments intended to value the patrimonial and natural wealth:
- The reconstitution of local offices of the Ministry of Agriculture, supported by experts, and operating over the medium and long term;
- The rehabilitation of water networks and sanitation, the rehabilitation of road networks and traffic lights, and pilot projects for solid waste management;
- Following the withdrawal, the launching of ambitious irrigation projects for South Lebanon with the water of Lake Quaraon (conveyor 800);
- Also, following the withdrawal, changing tobacco cultivation over a duration of 10 years, permitting substantial decline in the State budget and a better income for the farmers.

#### The phases of the programme

The implementation of this programme has been proposed to take place in two phases:

- Phase 1 corresponds to the actions that can be implemented now in spite of the persistence of the conflict: these actions are essential to preserve the potential of future development and to start the transition between the emergency assistance and development.
- Phase 2 corresponds to the actions that can be initiated after the withdrawal and the cessation of the conflict: these actions should respond to immediate post-war needs, in particular the return of the displaced, the change for those living on the war economy or on allowances linked to the war, and the tasks related to reconstruction.

Between these two phases, the withdrawal period will need specific actions which will essentially address the security situation, as will work on the social front: taking in charge freed prisoners, receiving flows of displaced,

The programme of Phase 1 has been presented over three years, whereas that of Phase 2 extends over the five years following the withdrawal. These time frames are indicative. The recent evacuation of Jezzine and its region shows that we can shift, at any time, between the two phases, or meet a situation in which these two phases overlap. To give the best result, the programme should stretch over a period of 10 years following the withdrawal.

# The computations of the programme

The computation of the programme has taken into account total public spending in investments, including assistance to South Lebanon, as well as an indicative supply for mine clearance and estimated expenditure by the Council for the South, along with the subventions granted by the Tobacco Administration.

The total expenditure, as a yearly average for Phases 1 and 2 of the programme (in absolute numbers) for the period following the withdrawal, is shown in the table below.

These expenses are in the order of US\$100 million per year in Phase 1 and US\$150 million per year in Phase 2.

#### The institutional set-up

To put the programme in action, an institutional set-up is proposed for the short and medium terms.

In the short term, the set-up uses existing organizations without waiting for new administrative reforms. A strong coordination should be formed between the Council for Development and Reconstruction (CDR), the High Relief Committee (HRC), and the

Council for the South, under the patronage of the Prime Minister. As the Secretariat, the CDR should manage the execution of the programme, coordinate relations with the institutional financial donors, commensurate infrastructure works (whoever the executing agency is), and lead specific actions for the socio-economical development activities in the programme. In order to carry out these tasks, the programme should form a small local management team. The HRC should confine its actions to interventions in emergency assistance, whereas the Council for the South should focus on allocating allowances to the victims of the conflict.

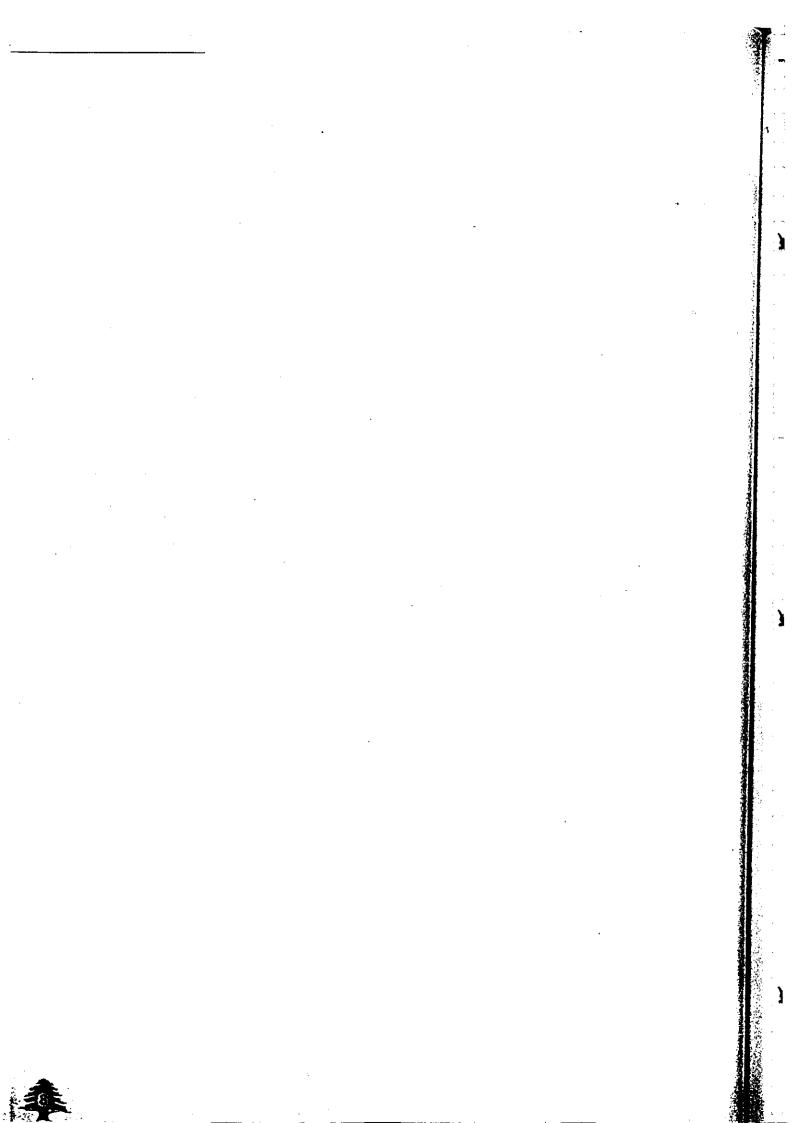
After the withdrawal, the emergency actions led by the HRC and the allowances given to the victims should progressively decrease, leaving in place a simplified organization. We can then imagine a structure of regional operational teams, within the CDR, addressing specific programmes in the framework of a policy for balanced regional development.

#### Resource mobilization

The development programme for South Lebanon should benefit from having important institutional partners of bilateral and multilateral cooperation and being sensitized by the government, taking into consideration the interests of all stakeholders. The mobilization of the diaspora is also necessary to encourage investment in South Lebanon, especially after the conflict. Finally, local non-governmental organizations would become instrumental partners in puttting the programme into action.

T1. Estimated costs of public investments and suggested assistance (in USS 1999)

	Phase 1: Average per year	Period of withdrawal	Phase 2 : Average per year
Section 1 : Development	8 365 000	2 300 000	25 891 000
Section 2 : Infrastructure and services	48 472 000	500 000	99 940 000
Section 3 : Assistance	45 200 000	3 500 000	21 874 000
Section 4 : Clearing of minefields	500 000	10 000 000	1 800 000
TOTAL	102 537 000	16 300 000	149 505 000



#### INTRODUCTION

The Lebanese Government, represented by the High Relief Committee and supported by the United Nations Development Programme, in August 1998, appointed a group of consultants to propose, for spring 1999, the axis of a regional socio-economical programme for the development of the regions affected by the occupation and conflict in South Lebanon.

This programme constitutes the project of the Lebanese Government for the development of the South in the perspective of peace and regained sovereignty. However, its implementation can be initiated despite the persistence of the conflict.

The development programme for South Lebanon is founded on the potential of this region, which allows it to aspire to diversified and harmonious social and economical growth and to living standards equivalent to those of other regions.

The proposed programme embraces all the components of the socio-economic development of South Lebanon, while according a particular importance to the impact of proposed measures suggested in five priority domains: the fight against poverty, consolidation of the civil society, the amelioration of the condition for women, the preservation of the environment, and the encouragement of private initiative.

It constitutes a step on the path to sustainable development, respecting the balance between human activities, natural resources, and patrimonial wealth.

For the elaboration of this programme, the consultants have accorded particular importance to the analysis of other experiences of development around the world. The project, of which a large part has already been translated into concrete actions on the ground, has also been the object of close coordination with a number of local experts on the situation in the South.

Before presenting the information gathered in the sector and the proposed programme, it is necessary to recall the following:

- the reasons that led the Lebanese Government to give priority to the development of South Lebanon;
- the reasons that required the elaboration of a programme similar to this one;
- the perimeters concerned by this programme.

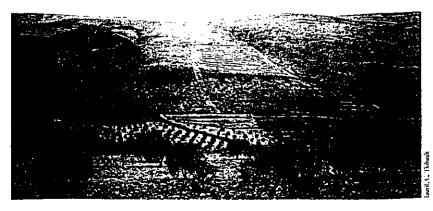
Why is it necessary to give priority to the development of the South?

The observation of the socio-economic indicators shows that Lebanon is characterized by important inequalities in development between its principal urban centers and the rural areas, between the coastal stretch and the inland, between the center and the periphery.

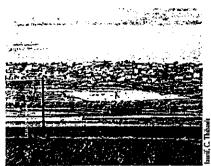
The less developed regions in Lebanon continue to be the North, the South, and the northern part of the Bekaa. These regions are calling for the putting into action of integrated policies of development, conjugating social and economical interventions with adequate financial and institutional frameworks.

Among these regions, South Lebanon has been considered a priority in the field of regional developmental actions, not that the economic and social indicators are systematically worse than elsewhere: Akkar and Hermel, for example, can, to a certain extent, be considered less developed than some cazas in the South.

Olive trees in Kfarkila (caza of Marjayoun)







Marjeyoun in the occupied zone, seen from Ibl-Saki (caza of Marjeyoun)

However, unlike other regions, the South presents two main constraints: under-development, and the presence of military conflict that has been affecting its physical and human resource base for more than 30 years.

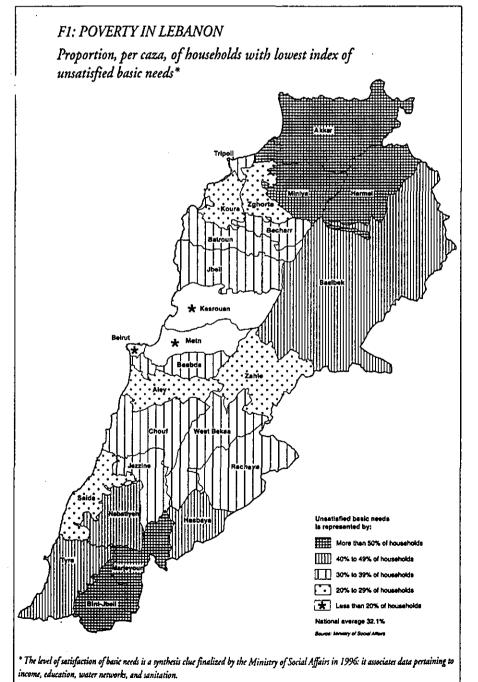
The development of the South is considered a national priority because of the stakes that are attached to its development: not only prosperity, but also the return to normality in the framework of sovereignty and the regained unity of the Lebanese Government.

The absence of a strong intervention in favor of the development of South Lebanon accompanying the conflict, as well as in post-conflict era, can have dramatic consequences in numerous domains.

If nothing is done to control the situation, the region might witness multiple negative dynamics as soon as the conflict ends:

- the uncontrolled return of thousands of displaced people to the South, leading to a multiplication of problems in the distribution of water and energy, and to an aggravation of environmental problems related to poor infrastructure for solid waste and sewer treatment;
- the touristic sites, which are major potential economic resources for the region, both natural and archeological, and water streams might witness irreversible degradation due to an uncontrolled movement of reconstruction;
- the phenomenon of retaliations and conflict between families and villages can take place and even persist for many years after the end of the conflict;
- thousands of families whose major source of income, whether directly or indirectly, is the war economy resulting from activities related to the conflict and related subventions can suddenly be deprived from economic resources;
- the opening up of the market to outside competition, in particular in agricultural production, could lead to the destruction of thousands of exploitations which have not benefited from various support to raise productivity and adapt to the actual conditions of the market;
- the persistence of poverty will continue to be at the heart of the conflict that can suddenly reappear at any moment.

In order to defy such a scenario, which might become reality if adequate measures are not



introduced, priority for South Lebanon is strongly re-affirmed.

Why is it necessary to establish an integrated socio-economic development programme?

For many years, the Lebanese Government has been undertaking multiple actions to support South Lebanon, with satisfactory actual disposition, described as follow:

- Actions of the Council for the South, which deals with the provision of allowances to the victims, in addition to reconstruction of physical infrastructure (damaged roads, rehabilitation of destroyed buildings, drilling of wells, or the construction of local facilities), all of which address locally expressed needs;
- Actions of the High Relief Committee, consisting primarily of emergency reparations, supply of food and medical aid (in cases of need), and mobilization of assistance. In partnership with the UNDP, the HRC in 1998 launched an experimental programme of socio-economic development (supporting agricultural cooperatives, fishermen's syndicate programmes, training, small municipal facilities, etc);

- Actions led by the CDR to rehabilitate and develop physical infrastructure and services in the framework of the national policy of reconstruction, in particular, water and sewer networks, road networks, and road axes. These works have partially stopped due to conflicts reigning these sectors;
- Actions of the Executive Council for Large Projects, in particular hospital reconstruction and the rehabilitation of public buildings and road axes;
- Actions led by different ministries and autonomous government agencies, each in their respective domain of competence;
- Social support to tobacco farmers through the purchase of output by the Tobacco

Administration with prices higher than market prices.

These efforts present three important deficiencies: they lack a global coherent framework of action; they address the economical constraints from an emergency assistance perspective (and not that of development); and they present coordination deficiencies.

In reality there is no reference document addressing South Lebanon and its evolution. There is a lack of a clear government strategy and policy addressing the development of this region. However, this void can not persist, especially that it concerns a region that is a concern to the Lebanese Government.

Public intervention is limited to three domains: social aid (and not social development), emergency assistance, and infrastructure rehabilitation when possible. However, no policies are clearly apparent either in the economic domain (development of the agriculture, touristic products, entrepreneurial development, marketing of produce) or in the social developmental domain (youth unemployment, lack of appropriate qualifications)

Finally, public action is also characterized by coordination deficiencies and an overlapping of efforts by several actors. For example, many artesian wells drilled by public organizations in villages and aimed for collective use are not controlled by the respective water authorities, which are deprived from the means of managing the quality and quantity of water resources in their jurisdiction.

Hence, the socio-economic development programme for South Lebanon can serve as a framework of reference for activities that will be proposed and implemented by public organizations and NGOs in this region.

It completes the actions advanced by the introduction of the development dimension and by the definition of an economic and social policy founded on the valorization of ex-



Platforms of the Roman hippodrome of Tyre



isting and future resources and functions.

It extends support to the Lebanese government to help attract the attention of different partners that may eventually be interested in contributing to the development of South Lebanon, before and after the withdrawal of Israel.

Finally, this programme gives the Lebanese Government the element of appreciation which will permit it, should the occasion arise, to define more clearly the respective competencies of the different public organizations engaged in activities in South Lebanon. It also allows the government to use this example for other regional development projects in the country.

#### Perimeters addressed by the programme

The delimitation of the concerned sectors by the development programme is founded on the identification of affected regions by occupation and conflict.

The following table shows that five cazas (among the seven that constitute the mohafazats of South Lebanon) constituted, before the recent evacuation of Jezzine, 113 occupied localities out of a total of 115. These

same five cazas counted 68 localities out of 77 bordering the occupied zone.

Two of these cazas (Hasbaya and Marjeyoun) are almost entirely included in the occupied zone. Half the caza of Bint-Jbeil is occupied, whereas the Tyre caza is partially occupied. We should note that the non-occupied parts of the cazas of Bint-Jbeil and Tyre constitute the area of deployment of UNIFIL, with the exception of the Tyre pocket which is controlled by the Lebanese army. The caza of Jezzine has largely been in the non-occupied zone but it reveals, for evident reasons, a problem to this programme.

These considerations hold a very particular interest in the five cazas of Tyre, Jezzine, Bint-Jbeil, Marjeyoun and Hasbaya which constitute the heart of the perimeter concerned by the present study and by the developmental programme.

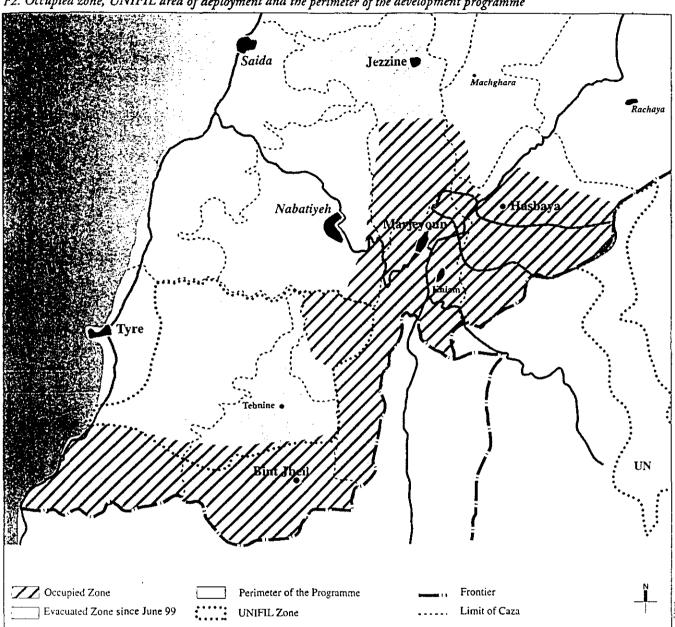
However, the perimeter of the developmental programme - with the strict definition of the term - also includes the whole of the cities and localities affected by the conflict and situated on the borders of these five cazas, these localities having often suffered from the conflict.

T2. Occupied villages and the border zone

Mohafazat /Caza	Total number of localities in caza	Localities in occupied zone	Localities in the occupied zone	Total localities
Mohafazat of the Bekaa				
West Bekaa	51	1	. 10	11
Sub-Total Mohafazat Bekaa	51	1	10	11
Mohafazat of Nabatiyeh				
Hasbayya	25	16	9	25
Marjeyoun	32	27	5	32
Bint-Jbeil Bint-Jbeil	36	17	16	33
Nabatiyeh (caza)	53	1	12	13
Sub-Total Mohafazat Nabatiyeh	146	61	42	103
Mohafazat of South Lebanon				
Jezzine	55	39	16	55
Туге	101	14	6	20
Saida	97	•	3	3
Sub-Total Mohafazat of the South	243	53	25	78
General Total	440	115	77	192

Source: Topographic map 1/50 000

N.S: The evacuation of Jezzine was not taken into consideration in this table, this caza counts 16 occupied and about 40 non-occupied localities.



F2. Occupied zone, UNIFIL area of deployment and the perimeter of the development programme

Hence, all localities of the caza of Nabatiyeh which are located on the border with the cazas of Jezzine and Marjeyoun are included in the perimeter of the programme. This concerns, in particular, the city of Nabatiyeh, but also the villages of Yohmor, Kfar Tebnite, Kfar Remmane, Habbouche, Arab Salim, Hounine, Jarjour, Ain Kana, Ain Bouswar, Jbaa, and their hamlets.

In the same way, the perimeter of the development programme consists of the locations of the West Bekaa caza which are on the border with the occupied zone, in particular Maidoon, Guelia, Lebbaya, Yohmor, Sohmor, Ain-Tine, and the city of Machgara, extending until the Quaraoun Dam, in addition to the non-occupied localities of the caza of Hasbaya.

The study could not, therefore, confine itself to these strict perimeters. It took into consideration the complementarity with bordering regions, in particular the city of Saida and the coastal zones between Saida and Tyre. It has also taken into consideration the position of the South in regard of the Near East and national context.



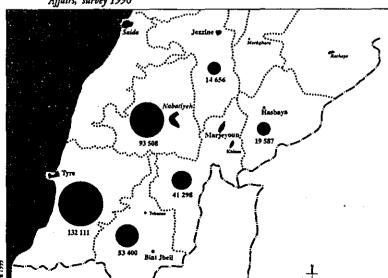
#### Note:

The present document had gone to press at the time of evacuation of Jezzine and its region at the beginning of June 1999.

The numerical data presented in the following pages correspond to the situation that was prevailing before this evacuation where the region of Jezzine was classified as part of the occupied zone.

From now on, the caza of Jezzine consists only of 15 occupied localities with about 3,000 to 4,000 permanent residents.

F3. Resident population per caza in 1996 Source: Ministry of Social Affairs, survey 1996



# A. THE OFFICIAL STATEMENT: A region heavily affected by the conflict

The conflict that continues to affect South Lebanon today has been evident for more than 33 years. It has been accentuated since the occupation of the borderline zone in March 1978 and the extension of this occupation towards Jezzine and Hasbaya in 1982. This exceptional longevity of the conflict has deeply marked this region, both physically and on the human front.

The goal of this section is to present the situation of this region, as it is today.

The following issues are studied:

- The people
- The territory
- Water
- Economic activity
- Infrastructure and equipment.

#### A1. The People

A1.1. The population

According to the survey conducted in 1996 by the Ministry of Social Affairs, the five cazas of Tyre, Marjeyoun, Jezzine, Hasbaya, and Bint-Jbeil counted 261,000 inhabitants (permanent residents) in 1996, constituting 8.4% of the Lebanese population (estimated at 3.1 million inhabitants in 1996), or 60% of the population of the two mohafazats of

T3. Resident population per caza in 1996

Caza	Number of permanent residents	% less than 20 years old	% more than 49 years old
Tyre	132 111	46 %	13 %
Jezzine	14 656	28 %	32 %
Bint-Jbeil	53 400	45 %	17 %
Marjeyoun	41 298	39 %	21 %
Hasbaya	19 587	35 %	22 %
Total 5 cazas	261 052	43 %	17 %

Source: Ministry of Social Affairs, survey 1996

the South and Nabatiyeh put together (about 433,000 inhabitants).

Some indicators allow an estimation of the demographic weight of the occupied zone within the five cazas. On the one hand, one quarter of the localities of the five cazas, including the cities of Marjeyoun, Jezzine, Bint-Jbeil, and Hasbaya, are located in the occupied zone. On the other hand, children of school age represent 29.5% of the total population, assuming that class size and rate of school enrollment are comparable within and outside the occupied zone (except for Jezzine, where classes are smaller). Hence, depending on these cross checkings, we can estimate that the population of the occupied zone represents between 26% and 29% of the total population of the five cazas.

This approach allows us to estimate the resident population of the occupied zone at 68,000-75,000 inhabitants. It also allows us to estimate the population in the UNIFIL area of deployment and the Tyre pocket at about 186,000-193,000 (of which more than 30,000 reside in the city of Tyre) in 1996.

Based on national projections, and tempered by the particular situation of the South, an analysis permits us to update these figures and estimate the population of the five cazas today (beginning of 1999) at 270,000 inhabitants, of which 70,000 are in the occupied zone (with the exclusion of the military forces and the increased population during the summer period).

# A1.2. Resident, registered, and displaced population

The resident population only represents a small part of the registered citizens in the files of the civil state of the concerned localities.

It was possible to calculate, according to an approximation method, the estimated resident and registered population for the five cazas, distinguishing the occupied and non-occupied zones. The figures corresponding to the registered population are obtained by applying a coefficient of 1.7 to the number of registered voters in the lists of the Ministry of Interior for the 1997 elections. The figures

for the resident population are obtained by applying a coefficient of 3.7 to the number of children attending school.

The two above coefficients result from former observations, and are relatively reliable when applied on very large groups, Application of these coefficients results in an estimation of the resident population in the five cazas. Figures arrived at using this method are almost equal to those in the survey conducted by the Ministry of Social Affairs in 1996.

The results of these calculations appear in the following table:

#### T4. Estimated resident and registered population in the five cazas in 1997 and extrapolation based on the number of voters and students

Caza & zone	Voters (1997)	Registered population (No. of voters X 1.7)	Students (97-98)	Resident population (No. of students x 3.7)	Ratio of resident to registered population	Number of non-residents
Bint-Jbeil						
Total	90 142	153 241	12 876	47 641	31 %	105 600
Occupied Zone	52 942	90 001	7 079	26 192	29 %	63 809
Non-Occupied Zone	37 200	63 240	5 7 9 7	21 449	34 %	41 791
Hasbaya						
Total	33 496	58 643	4 250	15 725	27 %	42 918
Occupied Zone	29 684	50 463	3 488	12 906	26 %	37 557
Non-Occupied Zone	4 812	8 180	762	2 819	34 %	5 361
Jezzine (before June 1999)	_					
Total	47 342	80 481	3 087	11 422	14%	69 060
Occupied Zone	41 747	70 970	2 187	8 092	11%	62 878
Non-Occupied Zone	5 595	9 512	900	3 330	35 %	6 182
Marjeyoun						
Total	75 849	128 943	8 239	30 484	24 %	98 459
Occupied Zone	68 756	116 885	6 933	25 652	22 %	91 233
Non-Occupied Zone	7 093	12 058	1 306	4 832	40 %	7 226
Tyre						
Total	119713	203 512	42 291	156 477	77 %	47 035
Occupied Zone	11 809	20 075	1 234	4 566	23 %	15 510
Non-Occupied Zone	107 904	183 437	41 057	151 911	83 %	31 526
Total 5 cazas						
Total	367 542	624 821	70 743	261 749	42 %	363 072
Occupied Zone	204 938	348 395	20 921	77 408	22 %	270 987
Non-Occupied Zone	162 604	276 427	49 822	184 341	67 %	92 085

Sources: Election lists and CERD. Calculation by the CRI



#### Remark concerning to the numerated data

The present report has retained as principal statistical sources the results of the following recent surveys:

- The Housing and Population Database Survey of the Ministry of Social Affairs (1996);

- The census of buildings and establishments in 1996 by the Central Administration of Statistics;

- The survey on living conditions and household income of 1997 by the Central Administration of Statistics;

- The survey on the displaced from South Lebanon of 1998 by the researcher M. Jaber.

These surveys, with the exception of the census of the establishments, are based on samples taken from sampling bases which are more or less reliable, generally constituted from the counting of buildings.

The absence of a general population census in Lebanon, which could have been susceptible to provide a base of a survey by a perfectly reliable poll, urges us to work with the numbers estimated by all these surveys.

These numbers correctly describe the surveyed samples. On the other hand, the amplitude of the absolute numbers, by extrapolation, is more subject to caution. It is given in increasing order instead of precise indications. The reader is urged to take this into consideration.

In other respects, the authors of the present report had themselves to estimate several numbers in order to approach the following two particular realities:

- The rates of population growth;

- The relative weight of the resident population with regard to the registered population in the registers of the civil state;

The estimated population growth rate was done by considering the different annual rates of the Lebanese population as presented by the Central Administration of Statistics in 1970 (2,126,325 inhabitants), by Saint-Joseph University of Beirut and the Laval University in Canada in 1987 (3,061,030 inhabitants), by the Ministry of Social Affairs in 1996 (3,136,617 inhabitants) and by the Central Administration of Statistics in 1997 (4,005,025 inhabitants). The resulting estimated rate of population growth is 2.2% per year.

The estimation of the relative weight of the resident population with regard to the registered population in the civil state was done, as indicated in the report, using two ratios for all of Lebanon in 1996: the number of registered people in the civil state was found equal to the number of voters registered in the files of the Ministry of Interior multiplied by 1.7, whereas the number of residents obtained in the survey of the Ministry of Social Affairs was found equal to that of students who attended schools multiplied by 3.7.

Finally, data relative to cultivated surfaces in the report is founded on the interpretation of the satellite imagery of July 1997. The surfaces obtained differ from those obtained by the FAO in the framework of a similar work done in the 1980s. The data represented in the actual report are more reliable than those which were presented by the FAO, since they have been ground verified, something which was not conducted by FAO. Moreover, FAO has signaled this deficiency in its report.

Two conclusions can be drawn from these numbers:

- The very weak proportion of resident population, compared to registered population, within the occupied zone is 22%, whereas this ratio is 69% in the non-occupied zone (the lowest ratio yet observed in the caza of Jezzine with only 11% resident to registered population). The occupied zone has lost more than two thirds of its inhabitants compared to a situation where there had been no occupation.

- The registered non-resident population of the five cazas amounts to more than 360,000 persons. These are residents in other Lebanese regions or abroad. Some have migrated voluntarily, whereas others have been forced to do so because of the conflict, and ensuing difficult conditions. Considering that a "normal" ratio of residents to registered population is 70% in this type of peripheral region, under such conditions the resident population would have amounted to 440,000 (of which 244,000 would have been in the occupied zone). Hence, close to 175,000 have moved out of the region as a result of the conflict (of which 166,000 would be in the only occupied zone).

Based on a survey done in 1998 on households originating from South Lebanon currently resident in Greater Beirut (Monzer Jaber, to be published in 1999), the majority of the registered non-resident population who have stayed in Lebanon are living in the caza of Baabda (49%), and in the Metn (14%).

## A1.3. Principal demographic and social characteristics

The 1996 survey of the Ministry of Social Affairs allows us to identify the principal demographic characteristics of the resident population in the region.

The five cazas of the region (Tyre, Jezzine, Bint-Jbeil, Marjeyoun, Hasbaya) counted a total of about 56,000 households (1996), with an average household size of 4.8 persons.

The smallest size of households is found in Jezzine, with 3.5 persons per household, whereas the largest size is found in Tyre (5.1 persons per household). The number of households in the occupied zone is estimated at about 15,000.

An over-representation of female heads of households can be observed, a characteristic phenomenon in the cazas of Jezzine, Marjeyoun, and Bint-Jbeil, with a proportion of 21%, 19.5%, and 18.5%, respectively, compared to a national average of 14%.

Compared to national ratios, the region is characterized by a young population, high illiteracy, a rate of unemployment higher than the national average, and a gender inequality in illiteracy rates.

The youth segment of the population is particularly perceptible in the south-western part of the region, where the proportion of youth below 19 years reaches as high as 45% in the cazas of Tyre and Bint-Jbeil, compared to a national average of 39%. On the other hand, this proportion is almost equal to the national level in the caza of Marjeyoun, decreasing in the caza of Hasbaya (to 35%) and Jezzine (28%), the latter being characterized by a strong proportion of those older than 50 years (32%, compared to 18% nationally).





T5. Some demographic and social indicators

		Tyre	Jezzine	Bint- Jbeil	Marje- youn	Hasbaya	Total 5 cazas	National
Age groups	<19	46 %	28 %	45 %	39 %	35 %	43 %	39 %
2	0 to 49	41 %	41 %	38 %	40 %	43 %	40 %	43 %
	>50	13 %	32 %	17 %	21 %	22 %	17 %	18%
Enrollment rate		32 %	21 %	24 %	20 %	23 %	27 %	26 %
Total illiteracy		19 %	15 %	23 %	27 %	18%	21 %	15%
Male illiteracy	ŀ	13 %	9 %	14%	16%	11%	13%	10 %
Female illiteracy	İ	25 %	21 %	32 %	36 %	25 %	28 %	20 %
Unemployment ro	te	8.55 %	11.22 %	10.68 %	7.42 %	9.02 %	8.99 %	7.60 %

Source: Survey of the Ministry of Social Affairs (1996)

This difference between the cazas on the western and eastern sides is partially explained by the escape of the young from the occupied zone due to "obligatory military service" in the South Lebanon Army militia. Illiteracy is higher than in the rest of Lebanon, and the rate is generally double for women. It is especially high among older age-groups, and for school-age groups.

# A1.4. Social problems related to the conflict

The conflict has produced a series of social problems including:

- the displaced
- widows and orphans
- disabled
- prisoners and ex-prisoners

#### A1.4.1. The displaced

South Lebanon has experienced numerous massive waves of displacement of its population in direct relation with the current conflict.

The exoduses started in 1970 in the Arkoub area (western side of Hermon), where thousands of inhabitants (30,000 - 50,000 according to news reports of that period) escaped shelling by heading towards Tyre, Nabatiyeh, Marjeyoun, and Saida. Another displacement movement took place in 1972-1973 starting from the region of Odeysse - Taibe - Aita-

ech-Chaab. In 1975-1976, the exodus amplified in the Arkoub, Khiam - Marjeyoun in the east, and Hanine - Yarine in the south. But the most important movements were those related to the military invasions in 1978 and 1982.

The displacement wave of March 1978 concerned the zone located in the southern and eastern areas of the Litani River. The invasion gave place, a short time later, to the constitution of the occupied border zone and to the deployment of the UNIFIL forces in the framework of resolution 425 of the United Nations Security Council. The military operations had, at this period, displaced thousands of families (30,000 families, of more than 120,000 persons, according to news reports at the period), who moved to Beirut and suburbs. First housed in emergency shelters (schools, tents, etc.), a number of these families went back to South Lebanon in autumn 1978. However, the majority of the families originating from the border zone remained in their place of exodus. The Beirut Southern Suburbs witnessed a demographic growth giving place to the constitution of the first illegally inhabited areas, of Ramel-el-Ali, Jnah, Hay-es-Sellom, and Ouzai. In Beirut, certain families found shelter in incomplete buildings, hotels, or vacant houses where they squatted.

The second-largest massive wave of displacement took place at the beginning of the second Israeli invasion in 1982. The whole region of South Lebanon remained occupied for three consecutive years, until Israel withdrew its troops behind the actual demarcation line. Few families returned during that period, but the end of 1985 observed a significant important return movement. In spite of this, the descending families from South Lebanon remained numerous in the Beirut Southern Suburbs which counted at the end of 1985 350,000 inhabitants compared to nearly 150,000 ten years earlier (survey conducted for the management scheme of the metropolitan region of Beirut). This population growth was due both to the displacement from the Eastern and the Southern Suburbs (population originating from Nabaa, the Karantina, and from Tell-Zaatar) during the Lebanese civil war, and the displacement of population from South Lebanon. It should be noted that these do not include displacement waves abroad or to other Lebanese regions.

Based on realistic estimates (M. Jaber and CRI, 1998), the number of people originating from South Lebanon and living in other regions or abroad currently number as many as 360,000 persons (200,000 in other Lebanese regions and 160,000 abroad), compared to a total resident population of 433,000 in the two mohafazats of South Lebanon. These same sources estimate the number of persons originating from the occupied zone at 272,000 (150,000 in the other Lebanese regions and 122,000 abroad), constituting around 75% of the total. A large part of this migration (probably more than the half) can be explained by an exodus or voluntary change of place of residence.

Moreover, based on the survey realized in 1998 (M. Jaber), only 18% of the persons originating from South Lebanon and established in other Lebanese regions are disposed to return to the South after the end of conflict. This proportion falls to 16% for those people who have immigrated outside the country.

These potential returns, representing some 48,000 persons, are not without problems. In fact, it is probable that they have had much difficulty in adapting economically and socially to the places to which they have migrated.

#### A1.4.2. The widows and orphans

The conflict that ruthlessly has affected South Lebanon for 30 years has caused thousands of deaths in all the groups of the population. The most dangerous shellings were those of 1978 and of 1982, followed by the 1982-1996 period, years during which the security arrangement consisted of saving residential

localities following the shelling over Qana.

Persons killed often leave families and orphans. Charitable associations and secular and religious organizations do their best to take care of these families, especially those who cannot benefit from a social and familial settings. There are no reliable statistics on the actual numbers, but evidence indicates that thousands of families have lost one parent, whereas hundreds have lost both. It is also estimated that most of the orphans are placed with extended families and that charitable institutions receive extreme cases numbering in their tens.

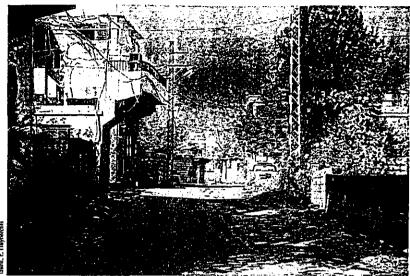
The principal problems for these families result from cessation of family income due to the loss of one or both parents, reflecting on nutrition, education, clothing, and social status.

The Lebanese government, through the Council for the South, has established a mechanism for taking care of families that have lost an adult family supporter in the conflict. This mechanism consists of two phases: an allowance of US\$13,000 given to the family on the day of the death of the family supporter, as well as continued assistance for education and health expenditures, especially for very young orphans from deprived backgrounds.

#### A1.4.3. The handicapped

The acts of violence in South Lebanon result in hundreds of wounded, especially because of shellings and mine explosions. Some of the wounded survive but with a life-long handicap.

As is the case of orphans, it is extremely difficult to know the exact number of the handicapped originating from the South, the majority of whom are received in extended families. The NGOs that are active in this domain do not make any distinctions based on geographic origin or cause of handicap in their estimation of the total number of handicapped.



Khiam village in the occupied zone, December 1998 (caza of Marjeyoun)

The situation is clearer on the national level, where the Ministry of Social Affairs has estimated that 18,000 handicapped persons have been supplied with identification cards from the ministry. Among these, 4,761 persons were followed up regularly in 1998 in 46 NGO centers spread all over Lebanon, essentially receiving assistance from the ministry.

The handicapped experience difficult psychological situations. Their families are also deprived and experience a loss of income, both in cases where the handicapped was the major income earner of the family or where another active family member leaves his/her job to take care of the handicapped person. Handicapped persons also wish to be recognized by the society and to find suitable jobs.

In addition to the support provided by the Ministry of Social Affairs, and to existing organizations housing handicapped persons, the Lebanese State provides for the cost of health services, including surgery and prosthesis, for the most deprived among the handicapped who originate from South Lebanon, through payments from the Council for the South.

Access to professional rehabilitation for the handicapped is limited, restricting their chances of finding placement in suitable jobs.

#### A1.4.4. Prisoners and ex-prisoners

The occupation of a part of South Lebanon was accompanied by thousands of arrests on different occasions. Since 1978, an institutional system of imprisonment has been adopted by the Israeli army and the SLA militia, especially in a detention center (a former barrack) in Khiam within the occupied zone and, at times, in detention centers located in Israel.

At the beginning of 1999, the center of Khiam numbered about 100 detainees, in addition to more than 200 detainees in Israeli prisons. Partial liberation operations are noted, in particular under the care of the International Confederation of the Red Cross.

Ì

Prisoners suffer bad conditions of detention, especially violence during interrogations, the lack of nourishment, and poor general sanitary conditions. Most suffer after their liberation from reversible health problems, including sight disorders, digestive system disorders, and back problems. They also suffer from psychological traumas and depression related to their isolation from the world and loss of morale resulting in difficulty in social and professional adaptation.

They also confront, after their liberation, immediate economic problems. Partial financial aid has been granted for a limited duration to freed detainees through the Council for the South and some NGOs. However, freed prisoners are job seekers with limited competence and in need to feel reintegrated and recognized in the society. Unfortunately, activities addressing rehabilitation and professional and social reintegration of ex-prisoners are still very limited.

#### A1.5. Housing conditions

The five cazas of the region (Tyre, Jezzine, Bint-Jbeil, Marjeyoun, Hasbaya) number about 78,000 households, of which 70% have principal residents (54,400), 10% have secondary residents (7,800), and 18% are vacant (14,000).

The vacancy rate is 20% in the cazas of Bint-Jbeil and Jezzine.

The census of damages resulting from the conflict (carried out in 1996) indicates that more than 12,000 houses were damaged in the five cazas (i.e. 15%), of which more than 2300 cannot be renovated, as shown in the table opposite.

Actual damages caused by the conflict is higher than these numbers if localities situated in the non-occupied zone along the demarcation line and in the cazas of Nabatiyeh and Western Bekaa are included.

The Lebanese State provides assistance to families whose housing units had been damaged or destroyed by the conflict. At the end of 1998, allowances provided by the State through the Council for the South amounted to US\$20,000 per destroyed housing unit and US\$13,000 for each damaged unit. However, a large number of families have reconstructed or rehabilitated their houses without such assistance whereas, inversely, a considerable number of families obtained allowances and did not use them for reconstruction or rehabilitation.

The state of the s

The housing units in the five cazas are essentially constituted of individual houses, with a proportion as high as 79% in the caza of Marjeyoun. However, collective housing units dominate the caza of Tyre, especially as it is the urban center for a major part of the population. (The dominance of such units is also observed in the caza of Nabatiyeh).

Most housing units are owner-occupied, with the highest rental rates in the caza of Tyre (12% compared to a national average of 23%). Around 90% of the houses have two to five rooms. Houses with four to five rooms are dominant in the cazas bordering Bint-Jbeil, Marjeyoun, and Hasbaya.

An examination of the housing conditions (see table) indicates in particular a lack of connection to drinking water networks, affecting 20% of the housing units in the caza

T6. Damaged houses in the five cazas in 1996

	Bint-Jbeil	Marjeyoun	Hasbaya	Jezzine	Tyre	Total
Total damaged housing units	2389	2262	288	2002	5106	12047
Housing units to be renovated	2021	1838	144	1567	4167	9737
Housing units in need total of reconstruction	368	424	144	435	939	2310

Source: Central Administration of Statistics, 1996 -

#### 17. Housing conditions

Coza	Elevator	Parking	Electric generator	Artesian well	Running water
Туге	0.9 %	19.5 %	6.9 %	9.5 %	80.2 %
Jezzine	0.1 %	12.8 %	3.3 %	0.4 %	90.4 %
Bint-Jheil	0.1 %	12.2 %	3.9 %	0.1 %	85.8 %
Marjeyoun	0.1 %	7.0 %	0.6 %	0.1 %	88.1 %
Hasbaya	0.4 %	15.3 %	0.5 %	0.1 %	94.8 %

Source: Central Administration of Statistics, 1996

of Tyre.

#### A1.6. The active population

The five cazas comprise 70,000 active persons (27% of the total population with a ratio of 1.27 active persons per household), of whom about 18,000 are in the occupied zone. The activity rate (27%) is lower than the national activity rate (31%), due to the presence of a more youthful population as well as a lower rate of female economic activity (lower than the national average).

The share of women in the active population is very small in the cazas of Hasbaya (12.9%), Tyre (13.1%), and Bint-Jbeil (16.9%). However, it is higher than the national average (20.7% in 1996) in the cazas of Marjeyoun (24.2%) and Jezzine (22%).

The highest unemployment rates were observed in the cazas of Jezzine (11.2%) and Bint-Jbeil (10.7%), compared with national unemployment rates (7.6% in 1996). Unemployment especially hits women and the youth between the ages of 20 and 24 years (47.1% in the caza of Jezzine, 29.5% in the caza of Bint-Jbeil, 18.5% in the caza of Hasbaya).

Shepherd with a herd of goats in Bourghoz (caza of Jezzine)



4.8 members. While, on the national level, the proportion of households found in this category amounts to 5.8%. Also, 33.2% of households in the mohafazat of South Lebanon and 21.5% of those in Nabatiyeh have a monthly income less than US\$330, compared to a national ratio of 18.8%.

The proportion of non-skilled workers varies between 20% and 24% depending on the cazas. Craftsmen occupy a similar proportion among the active population. Skilled farmers are predominant in Marjeyoun (24.5%), while intellectual professions occupy 24.8% of the active population in Jezzine, a caza also characterized by a strong ratio of economically active persons employed in the public sector (28% compared to 15.7% nationally).

Occasional and seasonal work is predominant in the five cazas, especially in Marjeyoun (52%), Bint-Jbeil (46%), and Hasbaya (43%), whereas the national average does not exceed 16%.

The agriculture sector employs 32% of the economically active people in Marjeyoun, 25.4% in Bint-Jbeil, 23.3% in Tyre, and 22% in Hasbaya, whereas Jezzine is characterized by a high proportion of teachers (19%).

When it comes to the household living conditions, a survey conducted by the Central Administration of Statistics in 1997 indicates that households in South Lebanon are poorer than the national average. Poverty is more accentuated in the mohafazat of the South (including the caza of Tyre) compared to the mohafazat of Nabatiyeh.

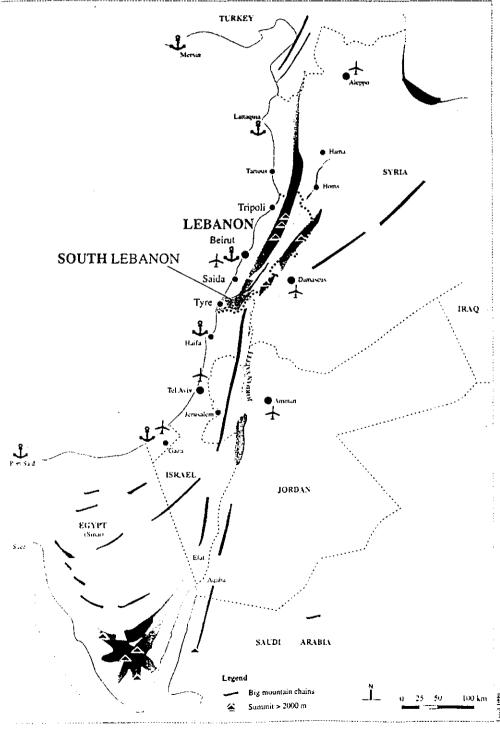
Around 10.4% of households in the mohafazat of South Lebanon and 7% of households of the mohafazat of Nabatiyeh have a monthly income less than the minimum wage rate (LP300,000, or US\$200) for a family of



#### A2. The territory

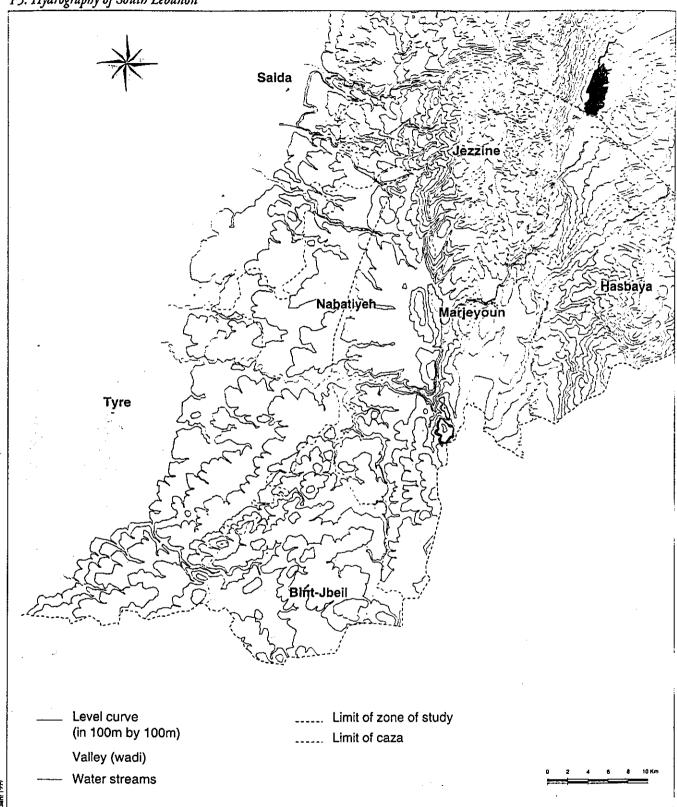
The region that has been closely studied corresponds to the Jabal Amel ancestral (jf the Amelites who in the 3rd century BC migrated from Yemen to inhabit this region). The central part (Jezzine) constitutes the southern extremity of the chain of Mount Lebanon. The eastern area includes parts of the Anti-Lebanon (Wadi-Taym mountain chain and Hermon).

The correspondent part of Jabal Amel morphologically forms an alliance with the Galilee and some authors even attribute to it the name of "Galilian Lebanon", or "High Lebanese Galilee". Historians define the Jabal Amel ancestral area as stretching from Akka in the south up to the Awali river in the north, from the Mediterranean Sea in the west up till Houle and Wadi-Taym in the east.



F4. The Near East

F5. Hydrography of South Lebanon





In fact, the topography of South Lebanon is largely formed of a succession of hills and plateaus, with altitudes generally varying between 200 and 800m inland, constituting a geo-morphologic configuration in continuity with the one observed south of the frontier.

The maritime front and the coastal plain have permitted the development of trading, cultivation, fruit and fishing, whereas the interior has witnessed the development of non-irrigated agriculture founded essentially on the production of cereals, tobacco, and olives.

A2.1. The urban structure
The cities of Tyre and Nabatiyeh are the two principal centers of the region.

と、日本の教育を持ちている。 とうないというとうできませんというないのできる。 からからないないないないないからいからいからい

The city of Tyre has over 30,000 permanent residents and is located in the center of a constellation of communities strongly related to it: the agglomeration of Tyre (the city with the nearest 10 localities) has more than 50,000 inhabitants (residents). If the next 20 communities are added, the total number of inhabitants will reach 100,000 inhabitants.

The city of Nabatiyeh is similar, though the core-city of Nabatiyeh (Tahta and Fawka) is less important than Tyre and has close to 15,000 permanent residents. The number of residents reaches close to 50,000 including

the agglomeration of about 10 surrounding villages.

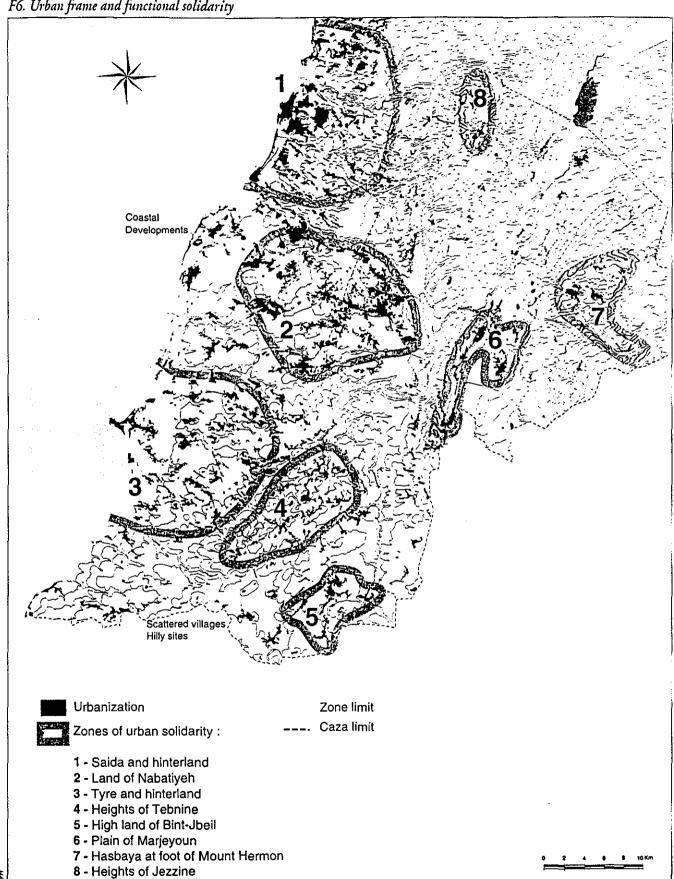
Other localities of the region are much smaller:

- In the caza of Tyre, only eight localities exceed 3,000 inhabitants and are within a radius of eight kilometers; the most important ones (Borj-Chemali and Aabbassieh) have fewer than 15,000 inhabitants.
- In the caza of Bint-Jbeil, only five localities or neighboring agglomerations have just over 3,000 inhabitants, including Bint-Jbeil, Aitauren, and Rmeich in the occupied zone, and Tebnin (between Jmeijme and Yater) and the Chaqra village in the non-occupied zone. All the other localities are below this threshold.
- The caza of Marjeyoun, the village of Khiam, and the linear agglomeration of Marjeyoun (Blat, Debbine, Marjeyoun, and Boueyda) have approximately 4,500 inhabitants each. The villages of Taibe, Kfarkila, Houla, and Majdel-silm have about 3,000 inhabitants.
- In the caza of Jezzine, only the village of Jezzine has 4,000 inhabitants, whereas all the other localities of the caza number around 1,000 inhabitants (the most important are Kfarhouna, Roum, Bkassine, and Aaramata).
- The same applies to the caza of Hasbaya with the village of Hasbaya barely reaching

View towards the south from Bir-es-Sanassel (caza of Bint-Jbeil)



F6. Urban frame and functional solidarity



3,000 inhabitants, whereas all the other localities have fewer residents.

Activities in this region are around this urban centered hierarchial structure, accentuated by the physical separations between the occupied and non-occupied zones. Hence, many "functional entities" are evident:

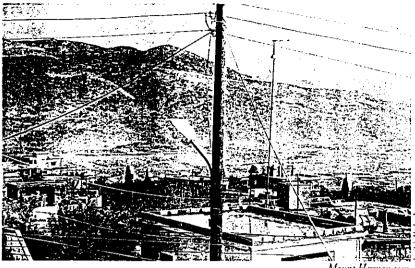
#### In the non-occupied zone:

である。 へい 本語ないから はいくかられい できること からかい 大いによる はなる はながらない

- the plateau of Nabatiyeh: including the agglomeration of Nabatiyeh comprising a series of localities situated on the front line between Jabaa in the north and Arnoun in the south;
- the region of Tyre: including the city, the coastal plain (intensely cultivated with citrus and banana trees), and the surrounding hills inland with about 30 localities;
- the region of Tebnin and south of Tebnin, to the front line:
- the north-east, near Lake Quaraoun: including three distinct entities separated by hills: Machghara on the foothills of the chain of Mount Lebanon; the Litani valley (Quaraoun, Sohmor, etc.), and Rachaya on the foothills of the chain of Anti-Lebanon.

#### In the occupied zone:

- Naquora and its hinterland: a less populated region hard-hit by the conflict and the occupation and including the small locality of Naquoura which benefits serving as the headquarters of UNIFIL.
- The high plateau of Bint-Jbeil: a region with important tobacco cultivation but which has lost most of its inhabitants;
- The plain of Marjeyoun: bordered by Marjeyoun and Qleiaa in the west and Khiam in the east where villages have been reconstructed after almost total destruction. The southern part of the plain, which reaches the borders, is wasteland;



Mount Hermon seen from Khiam (caza of Marjeyoun)

- Taibe and surroundings;
- the region of Hasbaya, reaching the hinterlands of Mount Hermon;
- the region of Aichiye-Rihane: an area completely deserted with the exception of some localities:
- Jezzine: overlooking the panoramic valley of Bisri covered by large stretches of pine forests.

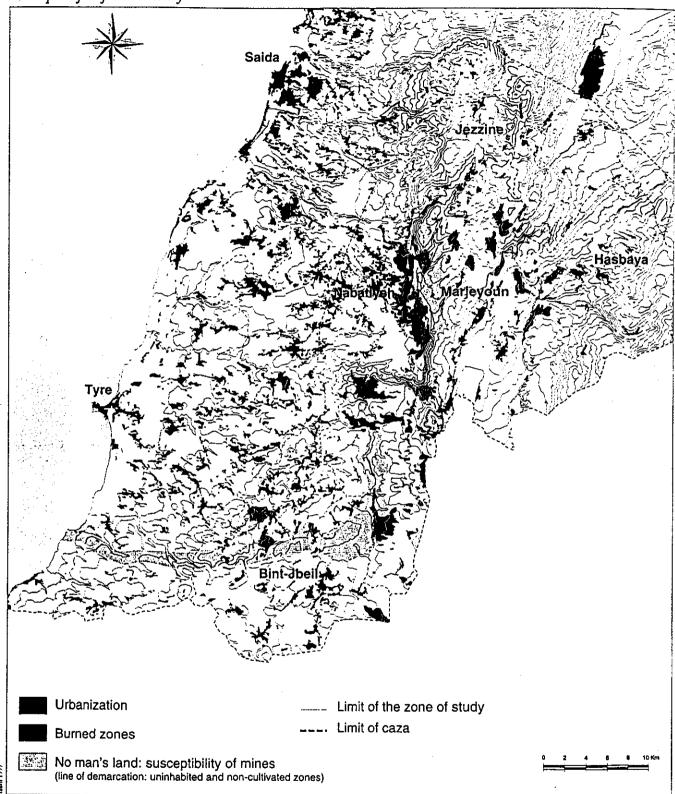
The conflict has halted urban development in the occupied zone and accelerated it in the non-occupied one, probably due to population movement from one zone to another.

#### A2.2. The marks of the war

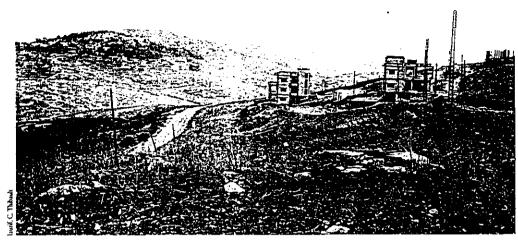
This territory carries the traces of the war that has been going on for 30 years. This is clearly apparent through:

- areas recently burned, which includes about 78km<sup>2</sup> along the demarcation line, especially in the cazas of Tyre, Marjeyoun, and Nabatiyeh;
- a stretch of possibly mined areas, all around the occupied zone, covering about 200km<sup>2</sup>, mostly steep ravines and valleys, in addition to the mountainous massifs in Tournat-Niha and in Hermon;
- a stretch of uncultivated areas generally corresponding to possibly mined zones;
- deforestated areas, especially reaching Mount Amel and the gorges of Litani and

F7. Impact of conflit on territory



285



Region of Hariss - Hadatha, close to the occupied zone (caza of Bint-Jbeil)

other regions, in addition to olive groves destroyed by fire.

- abandoned agricultural lands, bordering the demarcation line and the frontier, as in the region of Wazzane, and terraced cultivation;

- the spread of arid lands lacking vegetation cover on mountain sides and hills, due to fires, deforestation, and over-grazing of goats; - the desolate region of about ten villages and localities bordering the demarcation line, some of which are totally destroyed, others mostly abandoned, with ruins, wrecked cars, and fields flattened by bulldozers.

The conflict has also left less evident, but not less serious, traces in the lack of organization in human activities and in the management of collective services.

The abandoning of cultivation, the over-grazing of goats, the fragmentation of land, and the uncontrolled emission of pollutants on the ground and from the underground are also manifestations of this lack of organization.

T8. Figures of ground occupation
Based on images received from the satellite Spot, July 1997 (hectares)



Tyre region



Aitite and Cana (caza of Tyre)

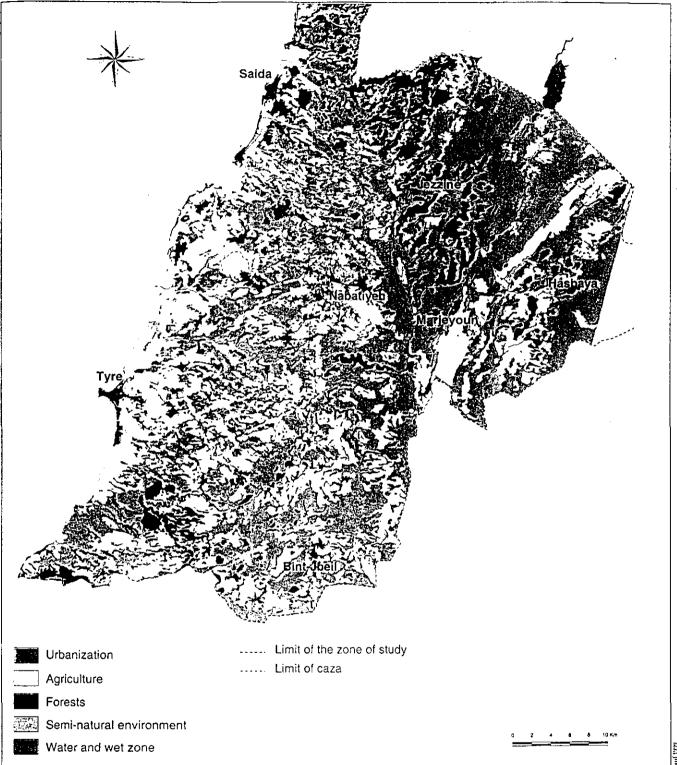


Kallaouyie (caza of Tyre)

	cazas : Tyre, Bint-Jbeil,	east : West-Bekaa	west : Nabatiyeh	TOTAL
	Marjeyoun,	(partial),	(partial)	
	Jezzine,	Rachaya (partial),	' · ·	
	Hasbaya	Chouf (partial)		
Dense urban area	78	0	0	78
Moderately dense urban area	1659	168	108	1934
Dense urban area	7457	190	1975	9622
Informal urban area	71	0	0	71
Seaside tourist complex	11	} 0 }	0 .	11
Archeological site	78	0	. 0	78
Large industrial or commercial area	36	] 0 ]	0	36
Port zone	2	0	0	2
Extraction of materials	367	75	0	442
Landfill	0	0 (	0	0
Urban extension	558	12	298	867
Other sites	607	20	84	711
Urban green spaces	1	0	0	ì
Cultivation	8240	654	1744	10637
Intensive cultivation	67	0	0	67
Orchard on dry land	16016	808	1437	18261
Orchard	6712	247	6	6965
Permanently irrigated perimeter	776	0	91	866
Heterogeneous agricultural zone	7024	52	1485	8560
Recently built terrace or being constructed	2073	178	36	2287
Residences on cultivated fields	920	0	231	1151
Residences on orchards on dry land	860	84	65	1009
Residences on orchard	25	0	0	25
Residences on irrigated perimeter	0	0	0	0
Residences on heterogeneous agriculture	769	162	7	938
Pine forest (conifers)	4383	244	243	4870
Forest (deciduous trees)	10430	335	504	11269
Dense garrigue	21579	1948	3054	26581
Scattered garrigue	36823	6498	3063	46384
Vegetation of bushes by mutation Bare rock	1252	2205	0	1252
Burned zone	4871 5817	3285	22	8178 7970
	201/ 0	168	1893	7879 0
Construction of residences in pine forest Residences in deciduous forests	11	0	0	ν 11
	53	0	125	178
Residences in dense garrigue Residences on scattered garrigue	304		71	176 375
Residences on scarterea garrique	71	0	0	3/3 71
Dunes	55	0	0	71 55
Beach	59	0	0	59
Wet interior zone	86	0	0	37 86
Water plan	21	0	0	00 21
Port basin	3	0	0	3
Non-cartographed area (mostly bare rock and garrigue)	5400	0	0	3 5400
		<u>-</u>		
Total	145622	15127	16540	177290



F8. Types of ground occupation (simplified legend)

THE PARTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PARTY 


31

#### A3. Water resources

South Lebanon possesses, in theory, important water resources, with the Litani and the Hasbani rivers, water tables fed from Mount Lebanon and Mount Hermon and numerous sources found in this region. Paradoxically, it is also in the South where there are the most critical cases of villages deprived of water compared to the rest of the country, not only for irrigation purposes (90% of the cultivation is not irrigated), but also for potable water.

The persistence of the conflict for over 30 years has also stopped the progress on the hydraulic resources projects which began in the 1960s with the blockage of Quaraon on the Litani River. This conflict and the Lebanese civil war are both partially responsible for the lack of water resource management by competent technical and administrative services.

#### A3.1. The neutralization and the deterioration of water resources

Most of the dispensable water resources flow into the sea during fall and to neighboring countries, and is lost through evaporation.

The situation along the coast between Saida and Tyre is typical of the difficulties faced in water resource management. On the Tyre plain, irrigation water is abundant through the Qassmieh - Ras El-Ain irrigation project. However, a delay in the modernization of irrigation networks has led to high water consumption and the transformation of the 360km of secondary and tertiary canals, resulting in higher costs. In the north, on the plain of Ghazieh, the destruction by the Israeli bombardment of the siphon of Zahrani has resulted in added drilling of artesian wells, leading today to an over-exploitation of the coastal aquifer resulting in the infiltration of sea water into the water basin.

The government has started works of rehabilitation on the Qassmieh - Ras El-Ain project, which will reduce water intake from the coast and the Qaraon dam. It has also conceived a experimental project over 100 hectares situated between Sarafand and Qlaile, to the north of the Litani, which can serve as an example for future projects. Reparation of the destroyed siphon in Zahrani, which should have been accomplished before the 1999 irrigation season, will result in a reduction in water pumping.

Inland, the water problem is different as there are villages totally deprived of water, while others are fed through the Litani but face important water pollution problems.

The government water authorities have invested substantial resources in the drilling of artesian wells. In villages not served by a water network, the Council for the South and local associations have drilled wells without the control of water authorities.

The majority of inhabitants do not have access to water resources in optimal quantities. Other problems include the unreliability of supplies and quality.

Principal problems concerning the supply of water in South Lebanon have been clearly outlined in earlier studies (World Bank 1994; ME/METAP 1994; FAO 1995; USAID 1997). These include low levels of precipitation throughout long seasons; insufficient utilization of water for irrigation of agricultural

Qaraoun Lake on the Litani (caza of West Bekaa)



lands; over-exploitation of the coastal plain caused by drilling of wells and leading to the infiltration of sea water; absence of planned water resource management and identification of underground water deposits; absence of adequate control on the drilling of wells; qualitative weakness in the maintenance of water networks, water reservoirs, canals, and pipes; deficiency in the measures related to water conservation; and the lack of water recycling.

The same type of problems applies to the quality of the underground water, springs, and waterways, which have had a tendency to deteriorate.

The coastal sheet is affected by the infiltration of chemical products from fertilizers, pesticides, and industrial waste, as well as from untreated waste water. The Litani is also subject to strong pollution, especially at Lake Qaraoun by untreated water including contaminated water from industries using toxic products like tanneries and paper factories. Springs, even when used as a source for potable water, are not protected from contamination. It is common to see swimmers in such springs.

Principal causes of water pollution are (refer to sources indicated above): insufficient treatment of waste water; pollution from industries and hospitals; inappropriate location of sanitary pits and other installations; inadequate collection and treatment of solid waste; pollution from automobiles (carburetors, oil, lead); infiltration of sea water along the coast; deforestation; excessive usage of fertilizers and pesticides; and inappropriate storing of fertilizers, pesticides, and drugs.

#### A3.2. Water supply

Water supply systems in the cazas affected by the occupation need total rehabilitation. The water authorities of Jabal Amel (cazas of Bint-Jbeil, Marjeyoun, and Hasbaya), of Tyre (caza of Tyre) and of Nabaa-Tasse (caza of Jezzine) have had parts of the infrastructure destroyed. Thus, they can neither supply water to the villages, nor control the multiple well drillings

executed by other public organizations and the private sector in order to provide adequate water supply.

The situation of these authorities and the zones under their responsibility was described in former studies, especially in the framework of studies executed by the CDR on the census of war damages (starting 1992). Data in these studies have been partially included in the elaboration of this report. The following elements are revealed:

#### Water Authority of Jabal Amel

This office covers three cazas, with about 115,000 permanent residents (excluding seasonal residents in summer). The office registers 22,500 subscriptions (households and enterprises) to whom water is daily distributed with an amount, on average, of 24,000 m' per day, i.e. 1.1 m³ per subscribed unit. However, since the water networks are old (30-50 years) and need rehabilitation, more than 50% of the total water supply is lost in the network during distribution. The amounts distributed witness seasonal variation. Furthermore, some villages receive excess water enabling them to use it for irrigation purposes, while others do not receive any water and are obliged to transport water by tanks for long distances.

The water resources of this authority are:

- Litani: A derivation of the river at the elevation of Taybeh permits a pumping station to force water back with a maximum capacity of 7,000m<sup>3</sup> per day from 171m elevation to 701m in one stage. The station supplies water to 20 localities in the caza of Bint-Jbeil and 27 localities in the caza of Marjeyoun. The actual delivery from this station is around 4,000 m<sup>3</sup> per day.
- Aquifer of Marj El-Khawkh: the underground water of the plain of Marj El-Khawkh ensures water supply to the region of Marjeyoun Qlaiaa Khiam (about 30,000 inhabitants) from three wells (Marj El-Khawkh, Ebl-es-Saki, and Hamam). The first two wells each supply 4,000m³ per day. The third is not yet completed but will produce a supplementary amount of 4,000m³ per day.

# La Faritanda

The Hasbani River to Fardiss (caza of Hasbaya)

#### Water resources in Lebanon compared to the region

Initially, Lebanon may appear, privileged through its resources in water, estimated at 4.5 billion m³ per year. However, these resources are irregularly distributed over the year, with five months (from January till May) totaling 75% of the precipitation, two months (June and July) totaling 16%, and the remaining months 9% of total precipitation. Added to this unequal distribution, difficulties of controlling water streams in their course toward the sea add to the geological conditions favorable for infiltration. What results is total water resources of 2.2-2.5 billion m³ per year, according to experts, including the FAO.

Lebanon hardly receives any water from neighboring countries. On the other hand, the Oronto and Nahr El-Kabir rivers supply Syria with around 510 million m³ per day, and all of the Hasbani and of its tributary, the Wazzani, goes to Israel amounting to about 150 million m³ per day. In addition, an equivalent volume of underground water which runs in the direction of the south has not yet been exploited.

The Hasbani is a tributary of the Jordan River whose basin cuts on 5 countries: Lebanon, Syria, Israel, Palestine, and Jordan.

In case of peace in the Middle East, the question of water-sharing of the River Jordan will again be raised.

South Lebanon is foremost interested in the developments concerning water, in particular sources such as the Hasbani and Wazzani rivers.

While the Johnston plan foresaw 35 million m<sup>3</sup> per day for the development of Lebanese land of the side basin of the Hasbani, the needs of this region will reach more than 59 million m<sup>3</sup> per day, of which 45 million are needed to irrigate 4,250 hectares and 14 million to satisfy domestic and industrial requirements.

Lebanon only uses 7 million m³ to irrigate 675 hectares and for domestic usage, which is insufficient.



- Sources of Chebaa: these sources feed, through gravity, the totality of the caza of Hasbaya (196,000 inhabitants). The locality of Chebaa is fed by the source of Ain El-Jaouz, whereas the other part of the caza is fed by the water source of Al-Maghara (also called source of Chebaa). Exploitation is from two stations, one in Hebbarieh (for the higher part of the caza) and in another Ain-Jarfa. The water resources can reach 25,000m³ per day but the quantity granted to the water authority is 2,300m³ per day. The total daily amount distributed is 1,800m³, whereas the remaining part is used for irrigation.
- Aquifer of Wadi-Jilou: three wells have been drilled with a cumulative supply of 11000m' per day, of which 8,000m' goes to Jabal-Amel water authority to feed the caza of Bint-Jbeil, whereas 3000m' goes to the water authority of Tyre.

- other sources include Ain-Qenia and Khalawat that feed the villages of the same names in the caza of Hasbaya, and the artesian wells of Chehabieh (600m³ per day) which feed Chehabieh and Selaa.

To compensate for the lack of water, the Council for the South in 1992, started to execute multiple drillings of artesian wells: seven in the caza of Marjeyoun, seven in the caza of Hasbaya, and 10 in the caza of Bint-Jbeil. Also, private individuals have drilled wells. It should be noted that these drillings are not under the control and surveillance of the water authorities, and that the water is partially used for irrigation.

#### Water Authority of Tyre

This office essentially supplies the caza of Tyre and 15 localities in the caza of Bint-Jbeil. It manages a daily supply of about 29,500m³ for a resident population of 132,000 (excluding additional population during summer). As in the case in Jabal Amel, problems of homogeneity in the supply of water to the region, and seasonal irregularity as well as inadequate installations, lead to a high rate of waste.

The resources used by the office are:

- Source of Rashidiyeh, with 6,000m3 per day

supplying Tyre;

- Source of Ras El-Ain, with 74,000m<sup>3</sup> per day, of which 15,300m<sup>3</sup> is granted to the water authority whereas the rest is used for irrigation;
- Aquifer of Wadi Jilou, with three wells that produce 3,000m³ per day benefiting the water office of Tyre and 8,000m³ to the water authority of Jabal Amel;
- Other drillings: the office of Tyre manages six wells in different localities of the caza with a supply estimated at 7,000m<sup>3</sup> per day.

Other drillings were executed by the private sector and by the Council for the South throughout the whole caza of Tyre and are not under the control of the water authorities. The Council for the South declares having drilled 23 artesian wells in this caza between 1992 and 1997. Most of the wells are used for irrigation purposes.

#### Water Office of Nabeh-Tasseh

This is the office that supplies the caza of Jezzine. Activity completely halted when the only pumping station currently inaccessible for security reasons was destroyed.

In fact, all the localities of the caza of Jezzine ought to have found alternative solutions for water supply, mainly by water capturing and by drilling of artesian wells:

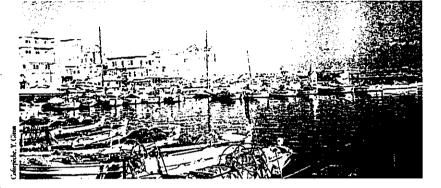
- Jezzine and bordering villages get 1,300m' of water per day by the drillings of Jouretes-Souk and of El-Halabi, and from the sources Azzib and Ain Dahab:
- About 10 water sources, two artesian wells (Aazour and Machmouche), and the basin of Anane allow residents to draw about 2,000m<sup>3</sup> per day in the villages in the south of the caza.
- Six other water sources (Aramta) supply the area with 850m³ per day in the south of the caza.

Other drillings have been executed by the private sector (the number is unknown) and by the Council for the South (five since 1992) for irrigation purposes.

#### A4. Economic activities

The economy of the region is characterized by the dominance of agriculturel as well as light industry and craft activities, to which are added small activities in the services sector. It is also characterized by the presence of activities directly related to the conflict (which will eventually disappear) and by the importance of informal activities.

Port of Tyre: the fishing area is restricted to a 3km wide stretch along the coast by Israeli navy



A4.1. Activities related to the conflict During the period of conflict and occupation, certain economic activities were developed, bringing income (generally higher than the average) to many families in this region.

These income sources include:

- permanent or seasonal employment in Israel: the number of concerned persons has increased since 1978, reaching a peak of 4,000 workers in 1996. However, this number decreased to 3,250 persons in 1997. These persons generally work in construction, agriculture, the hotel sector, and in some industrial activities. The average income per person amounts to US\$600 per month (varying between US\$350 and US\$750 per month depending on the occupied job);
- enrollment in militia named "South Lebanon Army" (SLA) and its "civil administration": the number of people in this militia is estimated at 3,000 men, including permanent staff and the young enrolled in obligatory "military service" imposed in the occupied zone. The average income in the SLA is US\$600 per month;
- economic spin-offs of the Israeli military presence in the occupied zone, such as trading, infrastructure, and services. Israeli funds

have been used to build schools, cultural centers, etc, in the occupied zone;

- activities brought on by the presence of UNIFIL where nearly 3,000 persons are directly employed in addition to trade and services;
- soldiers of the permanent militias of the armed movements operating against the Israeli troops and the SLA, as well as social and financial supports granted by political movements to the children and families of those whose members have been killed in the combat. An estimation of this income is impossible.

It is estimated that nearly 6,000 to 6,500 households gain their principal income from the situation of conflict in the occupied zone. This represents about one third of the resident population in this region. Also, around 1,000 to 2,000 households in the non-occupied zone are estimated to gain an essential portion of their income from this situation of conflict. This represents about 4% of the resident population of that zone.

In addition, the state pumps funds into the region as the conflict persists: The 8,000 to-bacco growers in this region (subsidized at US\$20 million in 1998), in occupied and non-occupied zones, as well as the tolerance in the payment of remuneration of excess workers (in the national education and in some autonomous state organizations).

Further financial support also comes from allowances given by the Council for the South to families of detainees, orphans, and other persons.

Activities and revenues related to the conflict represent an essential part of the income of families residing in South Lebanon, and is estimated at US\$80 million per year in cash, in addition to a total of more than US\$300 million (income from 69,500 economically active persons of the South), thus amounting to 27% of the total.

# A4.2. Agriculture A4.2.1. Agricultural exploitations

The following statistics are based on interpretations of satellite images from July 1997 and from other information (including information on tobacco), as well as from a survey conducted by the Ministry of Agriculture in 1997 and studies conducted by the National Litani Office.

It is important to note that the considered perimeter (1,773km²) contains the five central cazas (1,456km²) as well as parts of the bordering cazas: 16.5km2 of the caza of Nabatiyeh, 10.7km2 of that of Western Bekaa, 1.9km<sup>2</sup> of Chouf, and 2.6km<sup>2</sup> of Rachaya.

About 11,300 agricultural exploitations, occupying a total surface of 50,766 hectares (507.66km²) are included in this perimeter, i.e. 28% of the surface of the region is occupied by agriculture.

Orchards (generally citrus and banana trees), intensive cultivation, and irrigated surfaces represent about 7,923 hectares, that is 15.6% of cultivated surfaces. These cultivated areas benefit from irrigation, either by irrigation canals or through different processes of watering. Of the total, the orchards in Tyre represent more than 6,000 hectares.

Other agricultural areas are generally limited to non-irrigated cultivation, with some exceptions in the immediate surrounding of some villages (heterogeneous agricultural zones).

The important share of orchards, generally olive trees but also vines and almond trees, occupy more than 19,000 hectares, or 38% of all cultivated areas.

The geographic repartition of cultivated areas is presented in the following tables:

## 19. The origin of irrigation water per sector

Geographic Sector	Origin of irrigation water
Coastal plain between 0 and 70m, from the Litani to the frantier: 2 categories	Lintani and sources Ras el-Ain Underground water
Domain of the State of Jeftalac on the coastal plain	Source Ras el-Ain
Coast between 100 and 400m	Underground water
Western Bekaa (relevant part)	Litany
Hasbaya	Hasbani and tributaries
Marjeyoun	Dardara, Forage
Jezzine	Surface water
Bint-Jbeil	Underground water
Nabatiyeh (relevant part)	Litani + underground water

Source: Ministry of Agriculture 1997 and National Litani Office

# T10. Irrigated, dry and heterogeneous cultivated areas per caza in 1997, in hectares

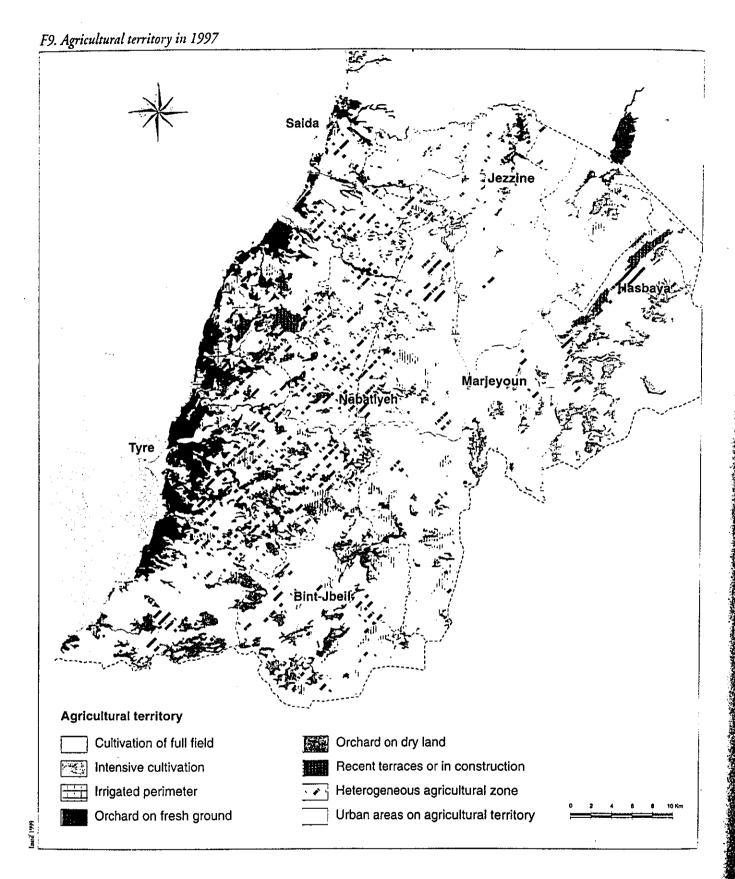
	Irrigated cultivation	Cultivation on dry ground	Heterogeneous cultivation	TOTAL
Туге	6324	5902	5606	17833
Bint-Jbeil	17	7578	1481	9076
Marjeyoun	150	7557	559	8266
Jezzine	789	898	726	2413
Hasbaya	300	4100	1493	5893
Western Bekaa (partial)	245	729	275	1248
Nabatiyeh (partial)}	97	3476	1528	5101
Rochaya (partial)	2	817	73	892
Chouf (partial)	0	0	45	45
TOTAL perimeter	7923	31058	11785	50766

Source: Interpretation of satellite images 1997. HRC-UNDP-IAURIF 1999



The plain of Marjeyoun where several types of crops are

As seen from Kliam (caza of Marjeyoun)





Owner -operated farms are predominant, constituting more than 76% of all agricultural exploitations. Farm rent and sharecropping patterns are insignificant. The farm rent, which does not represent more than 6-7%, is widespread in Jezzine and in the villages with high tobacco cultivation. Mixed owner-run farms (FRO + location) represent 15%.

Tobacco cultivation deserves particular interest, taking into consideration the atypical economical conditions which characterize it. The cultivation is largely subsidized by the state: over US\$73.3 million was paid by the Tobacco Administration in 1997 for the 11,000 tons, a grant portion of 47% or US\$34.3 million. The grant varies between regions: it is 25% in the Bekaa, against 70% in South Lebanon.

では、10mmのでは、1

Tobacco cultivation in Lebanon occupies 10,350 hectares (of which 54% are in South Lebanon and 29% in the occupied zone), employs 29,872 tobacco farmers, and produces 11,000 tons per year (of which 6,000 tons are in the two mohafazats of South Lebanon).

Cultivation of tobacco plays a special role in the economy of the study zone, where it employs about 8,000 active persons.

The net yield per hectare planted (grant included) amounts to US\$6,800. It is equivalent to certain types of irrigated tree orchards (lower than for banana and citrus trees, higher than for apple trees). Given that the average surface per tobacco farmer is 0.377 hectare, the net income per tobacco exploitation reaches an average of USS3,210 per year.

Tobacco, though covering less than 10% of agricultural land, the cultivation around which all agricultural production is organized, especially in the zone stretching from the south of the Litani to the frontier. This cultivation supplies an income five times greater than that of wheat. Depending on the region, the share of tobacco of a family's income varies from 25% in the high plateau of



Marjeyoun to 85% in the caza of Bint-Jbeil.

Tobacco brings additional revenue to 8,000 families of South Lebanon

Tobacco cultivation is essentially concentrated in the central region, especially in the caza of Bint-Jbeil, as well as towards Marjeyoun and the high part of the caza of Tyre. Ten villages in the occupied zone cultivate 1,374 hectares of tobacco, 46% of the total tobacco cultivation in the zone. The exploitations are small in size, less than one hectare in 90% of the cases.

Cultivation of tobacco requires 610 work days per hectare, or the equivalent of 24.4 times the number of days needed for the cultivation of cereals (25 days per hectare), or 2.5 times the time necessary for irrigated cultivation (242 days/hectare). Tobacco cultivation, covering 10.1% of total agricultural land, requires 49.4% of the working days for the growers (family workers included) of the region.

T11. Cultivation of tobacco in the occupied zone in 1997 Area/number of producers/production/net income

Caza	Cultivated areas	Number of	Production	Net i	ncome
	(hectare)	producers	of tobacco (kg)	(LL1000)	(USS)
Bint-Ibeil	1 249.2	3 225	1 347 374	16 168 480	10 778 992
Tyre	227.9	639	245 566	2 946 792	1 964 528
Marjeyoun	458.0	1 228	475 672	5 708 064	3 805 376
Jezzine	13.5	49	10 115	121 380	80 920
Bordering localities	1 047.0	2 790	1 109 820	13 317 840	8 878 560
Total	2 995,6	7 931	3 188 547	38 262 564	25 508 376

Sources: Ministry of Agriculture 1997, National Litani Office

T12. Profits and added values of some agricultural products in 1997-1998 Source: Intermediary Profit and Consumption: Regional Plan of the Hydro-Agricultural Development of the South, Socio-Economical Frame, FAO, Rome 1977 P.P. 44.49.

Actual prices (unit prices and intermediary consumption) in USS 1998.

Irrigated cultivation

Cultivation	Average profit USS/hectore	Intermediary consumption/hectare	Added value USS/hectare	
Banana	13 066	4 703	8 363	
Citrus fruit	12 000	4 200	7 800	
Egg-plant	7 000	1 960	5 040	
Cucumber	6 000	2 100	<b>3 9</b> 00	
Spinach	4 400	880	3 520	
Tomato	5 000	1 500	<b>3</b> 500	
Green beans	4 533	1 360	3 173	
Polato	4 500	1 350	3 150	
Water melon	4 000	1 400	2 600	

Non-irrigated

Cultivation	Average profit USS/hectare	Intermediary consumption/hectare	Added value USS/hectare
Tobacco (subsidized)	8 480	1 693	6 787
Lentils	2 730	410	2 320
Olives	1 875	375	1 500
Wheat	1 858	520	1 338

Animal production (average per head)

Type of animals	Average yield per head	Intermediary consumption per head	Added value per head	
Milk cows	2 098	600	1 498	
Ewes	183	77	106	
Goats (domestic)	154	66	88	



275 tons of fish is caught each year off Tyre

## A4.2.2. Livestock breeding

A survey executed by the Ministry of Agriculture in 1997 showed that existing livestock herds in the two mohafazats of the south had 12,568 cattle, 27,797 sheep, and 117,805 goats. Compared to the total of livestock in the country, the herds in the south has 22% of total number of cattle, 8.6% of sheep, and 23.8% of goats in the country. Out of total livestock in the two mohafazat of the South, the proportion of livestock in the occupied zone and the bordering localities represent 36.5% of cattle, 49.8 of sheep, and 51% of goats.

The goats and sheep are driven and bred in herds of 100 heads of goats and 50 heads of sheep. Cattle are usually herded by their owner, in small units of three to five per herd.

#### A4.2.3. Fishing

According to FAO data, the annual fish production in Lebanon in 1996 amounted to 4485 tons, of which 4,110 tons was caught in the sea and 375 tons was fresh water fish bred in fish farms (1996). This level of production is double the yearly average during the last 10 years.

In 1996, fish caught in the sea amounted to 1,941 tons in Syria (in regular progression for the last 10 years), 2,939 tons in Israel, and 1229 tons in Ghaza. These levels are equivalent to those in Lebanon and the length of the coastline can easily explain any differences between production in Lebanon and in neighboring countries.

On the other hand, fish production in aquatic farms is relatively less developed in Lebanon compared to neighboring countries: 375 tons in Lebanon (rainbow trout) compared to 7,290 tons in Syria (mainly carp) and 17,568 tons in Israel (seven varieties, mainly carp and tilapia).

Lebanon remains, like Syria and Israel, far behind Turkey and Egypt, which in the Near East have the richest sources of phytoplank-

ton and catch tens of thousands of tons of fish yearly in the Mediterranean.

The 4,500 tons of fish produced in Lebanon is far below the level of the internal consumption. Therefore, Lebanon imports more than 10,000 tons of fish (1996), essentially from three areas: the Gulf countries, Morocco, and Turkey. The fish is of lower quality and two to four times less expensive than the local catch. Other much sought-after fish is also imported, in smaller quantities, from Egypt and Senegal.

#### Fishing in the sea

The property of the property o

Lebanon has 3,000 to 4,000 fishermen, based in the ports of Tripoli, Byblos, Jounieh, Beirut, Saida, Sarafand, and Tyre (in addition to a few fishermen in Naqoura).

The fishermen of Tyre and of Sarafand, grouped under one union, number 520 and use 215 small boats (the number of which has a tendency to increase every year).

Of those, Tyre has about 300 fishermen and 170 small boats. Production stands at 275 tons of fish per year. The principal instruments of fishing are the multi-filament net (2/3 of the fishing), and the fishing line (1/3 of the fishing). 90% of the fishing is done at night and utilizes small boats for an average of 180 days per year.

The boats, generally between 8 to 10 meters, are well equipped and exploit the potentials offered by the actual fishing zones.

The port protects the boats well from the current, and has the necessary equipment except a dock for unloading.

The income per fisherman is estimated at US\$200 per month.

The principal problems facing this sector are:
- lack of security and the limitation of the fishing zone to 3km south of Tyre;

- a risk of over-exploitation of the resources: the number of boats increases, equipment is efficient, and the zone of fishing is narrow. Moreover, some sedentary species like the grouper are becoming rare, and fishing at lower depths is increasing;
- trading: three wholesale fishmongers, monopolize the purchase of the products brought by the fishermen. They have imposed exclusive rights of purchase, at prices lower than those of the market, through providing credit to fishermen for reparations or for investment purposes;
- outmoded equipment in the port with no facilities for cold storage or freezing;
- absence of hygiene in the handling of the fish, from the boat to the retail market,

through wholesale fishmongers and wholesale markets (Saida and Beirut);

- absence of all prospects of modernization, diversification, or new projects as the coast of Tyre is not suitable to aquatic usage because of a strong current, and fishing offers little interest (low potential, types of fish not in demand);
- very low revenue (US\$200) for families with six to seven members;
- absence of any type of social security for the fishermen.

#### Sources of data

This report has utilized information and data from a study conducted in South Lebanon in November 1998 by the French organization Cofrepêche as well as other sources and data banks.

# Fish breeding and fishing in fresh water

As indicated earlier, fresh water fish cultivation is not developed in Lebanon. The coastal current is too strong along most part of the coast to allow for the breeding of sea fish. Inland, Lebanon has about 40 fish-breeding farms of various sizes, of which the profitable types have the following:

- breeding of rainbow trout;
- use of oxygenated clear water by gravitation;
- an average annual production of about 15 to 20 tons;

- a narrow market as production goes to catering and a smaller portion goes to the retail market:
- financial rewards are good compared to maritime fishing (trout is US\$5/kg).

Fresh water fishing is very limited in Lebanon: In addition to the sporadic fishing in rivers (principally in the Litani), only fishing in the Lake of Qaraoun seems to produce significant volumes. Here, about 30 fishermen practice net fishing with about 15 traditional boats. Their annual production amounts to 30 tons, mainly carp and common trout. These types of fish are little appreciated and are suspected of being contaminated by pollution. They are sold at a low price (USS1/kg) to poor people of the villages of Western Bekaa, as well as in Syria.

There are no fish farms in South Lebanon.

# A4.3. Industrial and commercial enterprises and services

Most of the following data is from a census of buildings and establishments executed in 1996 by the Central Administration of Statistics.

According to this census, the two mohafazats of South Lebanon and Nabatiyeh have about 15% of all non-agricultural enterprises in Lebanon. In the five considered cazas, the enterprises number 13,524, strongly concentrated in the cities: the five major cities encompass 31% of the establishments of five cazas, whereas the city of Tyre alone has 20% of the total number of establishment of the five cazas.

The enterprises are usually small, with more than 90% having less than five employees (the national ratio being 68%).

The commercial sector is dominant with about 60%, followed by the services and industry sectors (about 20% each).

Important disparities exist between the cazas and their different localities. Many types of activities are under-represented in the cazas of Jezzine, Bint-Jbeil, Marjeyoun, and Hasbaya, compared to those of Tyre, Saida, and Nabatiyeh. This is the case for establishments in transport and data processing (practically none), finance and insurance (between zero and two enterprises per caza), equipment and machines, sales, and construction (between zero and eight enterprises per caza).

It should be noted that these sectors constitute potential fields of investment for the private sector, taking into consideration the lack of competition in the region.

#### Industry

Metal and agro-food industries represent 22% and 21%, respectively, of industrial enterprises in the South, making these two sectors dominant. However, regional specialization exists, as in the caza of Bint-Jbeil where textile and shoe industries represent 18% of the industrial enterprises.

Industrial enterprises are strongly dependent on raw materials, which are generally imported. They are also characterized by a relatively low technological level and a numerous, low-qualified workforce. The weak technological level is attributed to high costs in regard to certain imported products and higher labor costs which do not encourage investment in more productive techniques.

The industrial sector in the South, like Lebanese industry in general, can not yet meet international norms and manufacturing standards, making export difficult.

#### Trade and services

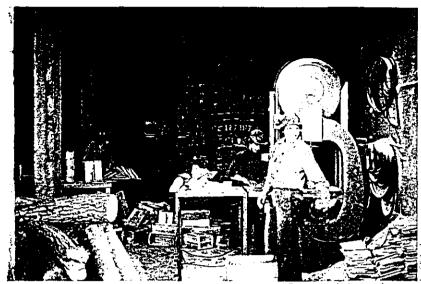
As is the case nationally, trade and services dominanate enterprises in the South. The retail trade represents more than half of all activities.

Traditional handicrafts

Traditional handicrafts remain a well-integrated activity in the South and in neighboring regions. The principal products are:

- cutlery in Jezzine
- pottery in Rachaya el-Fakhar
- carpets in Bakifa
- jewelry in Rachaya
- leather in Bint-Ibeil

However, taking into consideration that tourism has ceased and much of the population has been displaced, many of these activities have been transferred to Beirut. The return to normality and a reactivated tourist industry would spur renewed vigor to this sector.

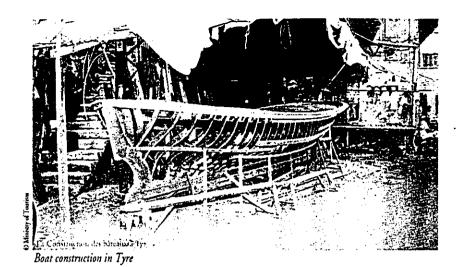


Factory producing wooden crates for fruit packing in Machghara (caza of Western Bekaa)

T13. Distribution of industrial enterprises per caza and nature of activity in South Lebanon (with the exclusion of the extraction industries)

	Saida	Tyre	<b>Jezzine</b>	Nabatiyeh	Bint-Jbeil	Marjeyoun	Hasbaya	Total
Agro-business and tobacco	340	227	52	185	74	58	29	965
Textile and leatherr	200	124	10	105	64	19	10	532
Wood and paper	122	65	11	69	33	18	17	335
Press and printing	25	13		14	1	- !	•	53
Non-metallic products	125	152	21	109	55	29	23	514
Metallic products	387	<b>2</b> 57	28	188	77	53	52	1 042
Equipment and machines	68	40	1	26	5	5 :	•	145
Furniture	371	153	12	142	36	15	6	735
Water, electricity, and gas	21	49	11	30	5	12	8	136
Construction	136	51	4	42	8	2	4	247
Total	1 795	1 131	150	910	358	211	149	4 704

Source: Central Administration of the Statistics 1995



#### Tourism

Tourism has practically stopped in all the region for 30 years. Few cultural festivals have apprehensively reappeared, and a very small number of visitors sometimes gets as far as Tyre: in 1997, 11,300 visitors viewed the archeological sites of Tyre, compared to 34,000 in Saida, and 122,000 in Baalbeck. The rehabilitation of Tyre Rest House, completed in 1996, was a success: this hotel restaurant is always full during the summer season.

114. Distribution of services and commercial enterprises per caza in the mohafazat of the south and of Nabatiyeh

	Saida	Tyre	Jezzine	Nabatiyeh	Bint-Jbeil	Marjeyoun	Hasbaya	Total
Trade of vehicles	1 452	970	90	961	243	185	100	4 001
Wholesale trade	327	155	23	107	53	49	19	733
Retail trade	4 309	3 360	350	2 192	976	720	418	12 325
Hotels and restaurants	568	407	68	268	94	83	40	1 528
Transportation	14	5		2	•	•		21
Auxiliary services of transportation	65	27	2	15	7	8		124
Mail and telecommunications	66	65	21	43	26	20	15	256
Financial establishments	30	28	2	10	-	1	-	71
Insurance	17	6	2	8	2	1		36
Auxiliary activities of finance and insurance	20	9	2	10	9	4	2	56
Real estate	23	21	1	16	1	2	1	65
Location of equipment and machines	19	17		16	1	7		60
Data processing	8	4	1	3		•		16
Other commercial activities	252	149	20	154	27	21	13	636
Pubic administration and social security	5	8	14	10	1	1	1	40
Education	122	83	1	46	17	17	8	300
Sanitary and social assistance	434	261	47	232	77	54	27	1 132
Social services	34	18	3	19	8	1	8	91
Leisure, sport and culture	105	95	15	48	24	22	10	319
Personal services	384	263	36	170	55	52	28	988
International organizations	5	41		2	25	4	8	85
Undetermined	7	2	-	•	3	-		12
Total	8 266	5 994	704	4 332	1 649	1 252	698	22 895

Source: Central Administration of Statistics, 1996



# A5. Infrastructure and facilities

With the exception of road networks which have recently been upgraded, including in the occupied zone, the region's infrustructure is in general of mediocre standard.

#### A5.1. Roads

のでは、100mmの

A study of the rehabilitation programme of road networks in Lebanon, conducted by Dar el-Handasa in 1995, revealed the following data:

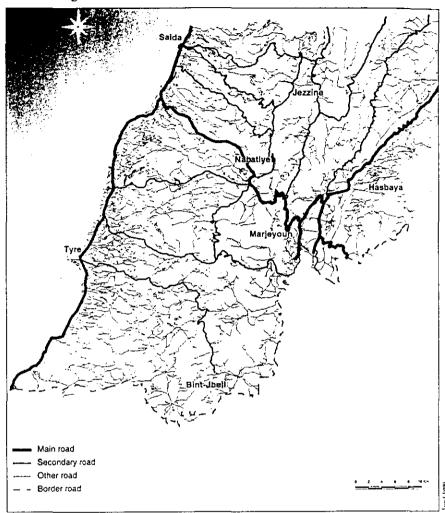
- 78km of international roads pass through the five concerned cazas. It includes the coastal road and the junction of Zahrani -Nabatiyeh - Marjeyoun - Masnaa;
- 160km of main roads also pass through the region. These seven routes including:
- north-south: Mdeirej to Jezzine via Beit Eddine;
- north-south: Jezzine to Chehabieh (crossing Tyre Bint-Jbeil) via Nabatiyeh;
- north-south: Bar-Elias to Marjeyoun via Quaraoun;
- east-west: Saida to Machgara via Roum, Jezzine, and Kfarhouna;
- east-west: Saida to Ibaa
- east-west: Ghandourieh Taibe Blaiaa (crossing the road of Nabatiyeh Marjeyoun);
- east-west: Tyre and Bent Jbeil via Jouaya and Tebnine:
- 296km of secondary roads in the region (five cazas) including 19 routes;
- 415km of local roads including more than 150 routes of which one third is in the occupied zone.

The state of the road network is acceptable, taking into consideration the work executed during the last years.

It is noted that the project for the extension of the coastal highway to Tyre is being executed.

The road traffic has not been counted. Some data exist for the intersections surrounding the city of Tyre (Dar el-Handasa, 1995). Hence, the observed daily traffic in 1995

F10. Existing road network

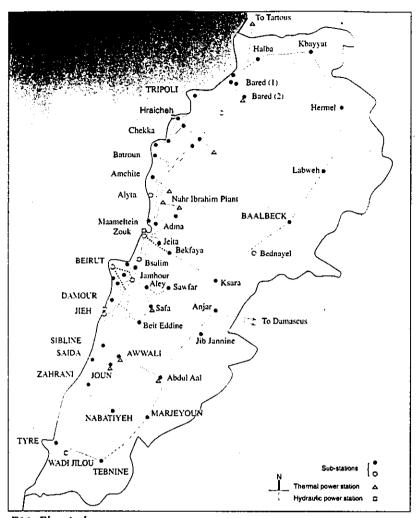


amounted to 30,283 vehicles over the five junctions surrounding Tyre, of which 48% of the traffic was on the coastal intersection. Among these vehicles, 16.5% as trucks, vans, and school buses, and 83.5% private vehicles.

A5.2. The electricity

Road towards Wazzani in the occupied zone, executed by the Green Plan (caza de Marjeyoun)





F11. Electrical network in Lebanon

The studied region (five cazas) has about 120,000 subscribers to electricity, including resident households, enterprises, administrations, and secondary residences.

Problems of capacity do not exist, taking into account important investments already being realized on the national network, with the rehabilitation of the power station of Jiyeh and four other power stations in other regions of Lebanon, in addition to the construction of two thermal power stations in Zahrani and Beddawi (US\$260 million worth of work started in June 1995). Also, a thermal power station, at a cost of US\$32 million, is currently being built in Tyre. All these power stations have already received their first equipment and will progressively become operational.

The construction of these power stations (as well as a unit in Baalbeck) covers the needs of Lebanon in terms of energy, at least for the 10 coming years.

However, in the considered cazas, problems

with the general state of distribution still exists. It is essentially characterized by:

- periodic cut-offs on the 66 kV cable linking Tebnine to Marjeyoun, where the network lock up is primordial. Even if this line is repaired (an expensive operation), it can easily be destroyed again because of its proximity to the demarcation line;
- poor condition of the 66kV cable linking Tyre and Tebnine;
- serious lack of 15-20kV transformers, amounting to 13 transformers of 400KVA, 56 of 250KVA and 27 of 160KVA;
- poor condition of the 15-20kV network, which is even non-existent in certain places.

The local services of the Electricity of Lebanon (EDL) are administratively and financially incapable of answering these needs, even the most urgent ones. Palliative solutions are found here and there in order to rehabilitate small portions of the network (Council for the South, NGOs, etc). In addition, serious problems of collection of electricity dues exist in the occupied zones controlled by militias.

The Lebanese government consented the free consumption of electricity for the inhabitants of the South up to 500kWh per household per month. However, consumption exceeds this level. In 1993 (latest known numbers), EDL dues in the five considered caza, accounted for 2.5% of the total national dues (for 8.5% of the population).

#### A5.3. Telecommunications

Up until 1993, only six telecommunication power stations had been installed in the region, a number remarkably insufficient.

The Ministry of Telecommunications has therefore launched significant projects aiming at increasing this number to 37 in order to satisfy the need and to assure optimal service. 19,000 telephone lines have already been installed in the framework of this project, which hold 40,000 lines in its totality.

The pursuit of the work has been slowed down by the situation of conflict. Eleven



new power stations have been installed, six others will be delivered soon, but about 20 others have been delayed.

#### A5.4. Sanitation

The most recent studies on sanitation in South Lebanon include the following:

- "Emergency Recovery Program, Waste Water Sector" number 7, Jouzy and Partners, 1992;
- "Lebanon Staged Waste Water Program", Khatib and Alami, Ministry of the Environment, 1994;
- "Tyre Waste Water Feasibility Study", Al-Mouhit/Lahymeyer International, 1995;
- "Study of Nabatiyeh Sanitation Feasibility Project", Cab. Merlin, CDR, 1998.

The following data are, for the essential, gathered from these studies.

The situation of the considered cazas can be qualified as critical with regard to sanitation.

The two principal centers of the region, Nabatiyeh and Tyre, which each has nearly 50,000 permanent residents, receive most of the economic activity, the major share of the holiday-makers, and have the worst sanitation systems. In each of these centers, the link to sewer systems only include the locality center, including less than 70% of households and enterprises. Neither one of these cities has at its disposal a treatment station. The wastewater is banked in the sea in Tyre, and in the valleys of Nabatiyeh.

Elsewhere in the region, only 10 localities are endowed with sewer networks, and only one of them (Marjeyoun) has at its disposal a treatment unit using activated mud. These localities are the following:

- Hasbaya: network dating from 1942, serving 50% of the households, and emitting waste water into a valley;
- Chebaa (caza of Hasbaya): network dating from 1958 serving 50% of the households

and emitting waste water in the Hasbani River:

- Jezzine network dates back to 1955, serving 50% of the households and emitting waste water in the Bisri River;
- Benouati (caza of Jezzine) network dating from 1982, serving 80% of the households, emitting part of the waste water in sanitary pits and the rest in the Bisri River;
- Breddine-el-Loukoch (caza of Jezzine), network dating from 1974, serves 90% of the households and emitting a part of its water in sanitary pits and the rest in the Bisri;
- El-Harf (caza of Jezzine), network dating from 1974, serving 70% of the households and emitting its water into the system of Beitel-Dine;
- Baitoura (caza of Jezzine), network dating from 1960, serving 80% of the households and emitting its water into a valley;
- Qaitoule (caza of Jezzine), network dating from 1956, serving 70% of the households and emitting its water in a valley;
- Marjeyoun, network dating from 1965, serving 75% of the households and discharging waste water in a treatment station of activated mud:
- Aabbassie, network dating from 1989, serving 50% of the households and discharging its waste water into the system of Tyre.

Most of these networks are in poor condition with leakage problems, deterioration of covers and control, etc.

Important localities, especially near Tyre and other cities like Bint-Jbeil, are still deprived of all sanitation systems.

This situation causes severe public health problems, as well as pollution of coastal water streams. The Lebanese government, therefore, engaged projects especially for sanitation of city center, in Nabatiyeh, Bint-Jbeil, and Tyre. The financing of these projects US\$10 million and more) is guaranteed by international loans (EIB, WB, France, and Italy).

## A5.5. Other infrastructure

The acquisition of the old coastal railway, of

16m average width, has been taken over in many places by cultivation, roads, and illegal housing is evident.

The pre-existence of a pipeline from Iraq to Zahrani, and which crosses the region, is also noted.

A5.6. Health equipment

The principal indicators of health equipment in the two mohafazat of South Lebanon are provided in the table below.

Based on these numbers, the hospitals of the South are essentially concentrated in Saida (18 private and one public), Tyre (six private and one public), and Nabatiyeh (six private and one public). Four cazas have only one

public hospital at their disposal, knowing that the hospital in Hasbaya has just been built and is not yet equipped. }

在東京地方の政治の大阪の神経を見るので、大日本大学の教育の教育の教育の教育の教育のなって、から、から、から、これではなるのでのないない。 しょしょう アンドラー かっちゅう

First aid and free health centers are more numerous than hospitals. They are operated by the Ministry of Health, the Lebanese Red Cross, and other NGOs.

A study conducted by UNICEF in 1996 showed that the principal health problems of the occupied zone included the lack of qualified personnel, the lack of means of transportation, and a low availability of special services such as dental care, radiology, and basic services (general medicine, pediatric, etc). The study indicated a good follow-up in vaccinations and a good availability of medicines, but a lack of old people's homes and social centers.

The occupied zone has about 106 doctors, but they are unequally distributed. The caza of Hasbaya presents the worst situation, as it is waiting for the opening of a new hospital completed in 1998. The worst ratios of health support personnel (nurses, laboratory technicians, etc.) are noted in South Lebanon, especially in the caza of Tyre.

Finally, the sanitary environment deserves to be mentioned. In the cazas of Bint-Jbeil and

Garbage heap near Khiam: public health problems are fewer in

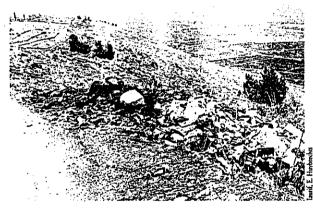
terms of equipment than

in terms of general hy-

giene conditions

drinking water)

(drainage, garbage,



T15. The principal indicators of health equipment in the two mohafazats of South Lebanon

(aza	Saida	Туге	Jezzine	Nabatiyeh	Bint-Jbeil	Marjeyoun	Hasbaya
NUMBER OF HOSPITALS							
Public	1	1	1	1	1	1	1
Private	17	5	0	5	0	0	0
Population per hospital bed			İ				
Public	1 845	1 735	366	2 053	1 146	422	326
Private	153	386	-	540	₽+	-	
Medical ratio/ paramedical	2.5	3.6		2.9	2.0	2.0	
Population per health professional							
Principal professions	320	707	366	469	543	375	1 946
Support professions	809	2 551	-	1 339	1 098	757	-
SANITARY ENVIRONMENT							
no potable drinking water %	3.1	7.7	-	3.2	14.2	1.5	12.5
no heating %	10.1	6.0		2.0	1.7	0.3	

Sources: Population and Household Database Survey, 1996; Hospital Directory; Lebonese Syndicate of Hospitals, 1997.



Hasbaya, a high proportion of localities is not linked to the drinking water network. In Jezzine, many localities use water from local sources and tank water is used in numerous localities of the cazas of Bint-Jbeil and Marjeyoun.

# A5.7. Educational equipment

THE RESERVE OF THE PROPERTY AND THE PROPERTY OF THE PROPERTY O

Education constitutes a fundamental element in all reflections concerning socio-economical development. It is the corner stone of the construction of know-how, savoir-vivre, and citizenship. In the considered geographical region, education suffers from important weaknesses, despite the construction efforts of premises in the last five years.

The five cazas of the study region has 284 schools, of which 115 are located in the occupied zone. These schools received, in 1998, 71,055 pupils, of whom 18,426 were in the occupied zone and were essentially concentrated in Bint-Jbeil and Marjeyoun.

School enrollment rates reach 98% of the age groups for elementary classes and 89% for intermediate level age-groups, which is close to the national averages (97% and 88%, respectively). On the other hand, this rate is only 48% in secondary classes, while the national average is 58% in the concerned age-group.

The condition of school premises is poor in

T16. Distribution of schools per caza, zone and status

		Total re	gion	· <del>-</del>	Occupied Zone				
Caza	Public	Free Private	Private	Total	Public	Free Private	Private	Total	
Bint-Jbeil	37	10	13	60	19	7	6	32	
Jezzine	17	3	4	24	14	3	2	19	
Tyre	72	15	35	122	9	0	1	10	
Hasbaya	19	6	8	33	13	3	1	23	
Marjeyoun	26	7	12	45	18	5	8	, <b>3</b> 1	
Total	171	41	72 ;	284	73	18	24	115	

Source: Center of Educational Research and Development, 1997-1998

#### 117. Surface areas and general state of school premises

Caza	Surface (m²)	Good or acceptable	Need important reparations	Poor, need rehabilitation exceeding 70% of the total cost	Not applicable
Hasbaya	16 783	84 %	13 %	3 %	0 %
Marjeyoun	24 390	91%	9 %	0 %	0 %
Туте	93 133	80%	15 %	5 %	0 %
Bint-Jbeil	40 495	67 %	20 %	5 %	8 %
Jezzine	13 757	96%	3 %	0 %	2 %
Total	188 558	80 %	14 %	4 %	2 %

Source: Center of Educational Research and Development, 1997-1998

many places, especially in the cazas of Bint-Jbeil and Tyre, with a high proportion of buildings to be repaired. The surface area per pupil is reduced in the intermediary level in these same two cazas, with 2.68m<sup>2</sup> and 2.97m<sup>2</sup> per pupil, respectively.

Classes are often held on rented premises not designed for this purpose.

T18. Distribution of pupils per caza, zone, and level

			Total region		Occupied Zone					
Caza	Pre-elementary	Elementary	Intermediate	Secondary -	Total	Pre-elementary	Elementary	Intermediate	Secondary	Total
Bint-Jbeil	2 069	6 482	3 652	772	12 975	1 124	3 341	2 173	590	7 228
Jezzine	436	1 <b>2</b> 57	990	411	3 094	391	950	651	202	2 194
Tyre	6 601	21 429	10 637	3 524	42 191	319	760	102	53	1 234
Hasbaya	660	2 151	1 307	448	4 566	523	1 400	1 020	318	3 261
Marjeyoun	1 206	3 860	<b>2</b> 427	736	8 229	666	2 216	1 349	278	4 509
Total	10 972	35 179	19 013	5 891	71 055	3 023	8 667	5 295	1 441	18 426

Source: Center of Educational Research and Development, 1997-1998

Thus, in the caza of Bint-Jbeil, the schools found on premises are those of Debl, Rmeich, Aita-Chaab (elementary), Ramie, Beit-lif, as well as the secondary schools of Bint-Jbeil. In the caza of Marjeyoun, only the school of Dibbine is on location. In Hasbaya, the schools on location are those of Ain-Jarfa, Hasbaya, Ain-Kenya, Hebbariye, Kfar Hammam, Kfeir, and Marj-Zouhour. In the occupied part of the caza of Tyre, the school of Alma-ech-Chaab is on location. Finally, in the caza of Jezzine, the schools on location are those of Kfarhoune, Haitoura, Rihane, Senia, Srayre, Ain Majdalayn, Wadi-Jezzine, and Anane.

Some schools are not functional anymore. This is especially the case in the caza of Jezzine, where the schools of Louaize, Qattani, Aichiye, Mlikh, Boslaya, Anan, El-Midan, Bisri, Ari, Behnine, El-Mathane, El-Harf, Mrah-el-Habas, and Kfarfalous are closed. It is also the case for the schools of Rcheif, Srobbine, Beit-Yahoune, Tayre, and Kounine (villages destroyed and partially abandoned) in the caza of Bint-Jbeil.

Other data show that the situation in the Nabatiyeh secondary schools is critical from the point of view of surface per pupil (2.88m²), partially because this locality receives pupils from the occupied zone.

Practically all the schools in the region suffer from a lack of equipment in laboratories, libraries, teachers' rooms, and infirmaries. The heating, lighting, telephone and drinking water equipment need serious rehabilitation.

#### Teachers

The five cazas of the region have 6,202 teachers, of whom 3,757 work in the public sector. The occupied zone has 2,178 teachers, of whom 1,510 work in the public sector. The student/teacher ratio (an average of 11 students/teacher for the five cazas) appears to be particularly good, especially in the public sector (9 students/teacher), and especially in the

occupied zone (8 students/teacher overall and 6 students/teacher in public schools). This is no doubt due to the delay of adjustment of the number of teachers with regard to the migratory waves which took place in these zones.

However, this ratio does not necessarily reflect a better quality of education since it could also reveal certain ineffectiveness or non-productivity, especially in the public sector, and thus does not provide in itself any indicator of the quality of education.

#### Technical education

2,017 students are registered in the 18 technical institutions (two public and 16 private) of the region (five cazas), representing 4.1% of the national total. Considering that the region represents 8.5% of the Lebanese population and that the principal activities are agriculture and the craftsmenship, there is a lack of technical and professional education which should have been at least twice higher than its current level.

# Higher education

The universities operating in South Lebanon are the following:

- Saida: the Lebanese University, Saint-Joseph University, and the Lebanese American University. A CONTRACTOR OF THE PROPERTY O

- Nabatiyeh: the Lebanese University

Most students registered in the South are enrolled at the Lebanese University in Saida, which has only four faculties: Arts, Law and Administrative and Political Science, Social Science, and Public Health.

The campus in Nabatiyeh offers two majors: Sciences, and Business and Economy.

# A6. Synthesis of the conflict's impact

The actual situation of South Lebanon is strongly marked by the current conflict. In addition to the daily increase in victims, the conflict has also negative repercussions on the development of this region.

The conflict leads to:

THE REPORT OF THE PROPERTY OF

• A loss in human resources

This loss is numbered in thousands of deaths and handicapped, and tens of thousands of displaced.

The analysis outlines the demographic shortage due to the conflict in the region to 175,000 persons, of whom 166,000 are in the occupied zone. By successive waves, this territory has endured a demographic drain, feeding essentially the suburbs of big cities, especially Beirut. Here, thousands of families, forcedly displaced, still live in precarious conditions: poverty, illegal habitat, mediocre access to services, largely unsatisfactory sanitation conditions, unemployment, and shadowy activities.

- Specific serious social difficulties
  Thousands of handicapped, orphans, ex-prisoners in need of integration, countless cases of patients with psychological trauma represent lost resources, without counting the cost born by the society.
- A cessation of economic activity Industry and trade is slow. Tourism does not exist anymore. Agriculture has regressed. Fishing is limited to a distance of 3km off Tyre. Roads are closed between the cities, presenting communication.
- The almost irreversible destruction of many resources

Due to fires and forced abandonment of agriculture in many regions, which have aggravated erosion and destroyed vegetation on hills. This is also the case for major archeological or historical sites, which have been

devastated, sacked, and seriously destroyed.

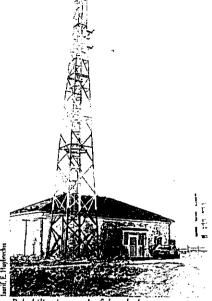
- The neutralization of vital natural resources This is, in particular, the case for the Litani water, which should have been used for potable water and irrigation, but development projects, including canals and dams, have come to a dead end because of the conflict.
- Excessive high costs

Other than the loss in human lives, the conflict has caused destruction which calls, every time, for reparation. Every year, thousands of tons of explosives are poured on the region, destroying tens of houses, public buildings, and infrastructure which need to be repaired when possible.

To the cost of reconstruction, that of mine clearance in this region will be added as the demarcation line between the occupied zone and the non-occupied has been frozen for the last five years in some places, and the last 19 years in other ones.

#### • Public assistance policies

The Lebanese government is asked to provide direct support to the population living under conflict. This assistance covers variant forms of aid: indemnification of victims, price of support for certain agricultural products, tolerance for the added numbers in the public administration, etc. Being unable to orient the public credit towards investment stimulators of economy, the assistance policy risks the creation of dependence, of which certain social categories will be unable to extract themselves from. Considering the actual state of public finance in Lebanon, it is urgent to start the recycling of assistance credit towards actions of development.



Rehabilitation work of the telephone network which has stopped due to the conflict. Khiam, December 1998 (caza of Marjeyoun)



Sorting fishing nets in Tyre

# B. THE POTENTIAL: Strengths and weaknesses facing the development of South Lebanon

The present situation of South Lebanon should not make people forget that this region possesses important potentials for development, which can be profited from as soon as the conflict stops.

The objective of this section is to identify these potentials in the different domains, in order to identify the following:

- the human potential, which is at the base of any attempt of development, and which includes the level of qualification and people's capacity to invest in the prosperity and future of this region;
- the agricultural potential, essential for the upholding of rural populations and improving their living standards;
- the touristic potential, which can form a new road for development, one which has a potential for job creation in various categories;
- the potential in the industry and services sectors, these constituting the principal base of job creation.

The section is based on an analysis of strengths, weaknesses, opportunities, and constraints facing South Lebanon in each of these areas.

# **B1** The human potential

B1.1. Strengths and opportunities

After the end of the conflict, the region of South Lebanon will witness significant demographic growth, which can be an advantage for its development.

On the one hand, the rate of natural growth will become closer to the national population growth rate, estimated to stabilize around 2.2% per year for a minmum of five years before it declines to 2% per year during subsequent years.

On the other hand, many displaced persons, including those who have voluntarily migrated, are expected to return to this region. A

study conducted in 1998 on the displaced population and immigrants from the region (M. Jaber, to be published in 1999), revealed that the population expected to return after the end of the current conflict will only amount to 18% of the registered non-resident population. This proportion varies from 16% for those persons originating from the occupied zone to 25% for those from the non-occupied area. The low level of this ratio is due to the length duration of the conflict during which most the displaced families have settled elsewhere in terms of professional activity; housing, social relations, and schooling for children.

Applying this ratio to the concerned populations allows an estimation of a total of 48,000 returnees during a peak period of five years, counting from the date of the end of the conflict. However, the longer the duration of displacement, the lower the number of returnees.

A theoretical estimation of demographic projection over 10 years, based on the assumption of an immediate cessation of the conflict, was conducted in the context of this study. Although such an exercise does not correspond to immediate future reality, as the end of the conflict will depend on a political timetable, nonetheless, this exercise was found instructive.

The principal results of this exercise are presented in T19.

できるとは、日本のでは、

The conclusions derived from this exercise are the following:

- In case of the cessation of the conflict, the population of the five cazas could grow very rapidly during the first three years (about 20% in three years) due to the return of the displaced.
- This population growth will decrease and at the end of the tenth year, the five cazas will have gained more than 11,3000 supplementary inhabitants, or an increase of 43% in all.

The South will profit in other respects from the dynamism of its population, and from the strong attachment to the territor many originating from the region display, whether residents in Lebanon or living elsewhere.



T19. Demographic projections for 10 years (assumption end of conflict at the beginning of year 1) in the 5 cazas

(5 cazas)	(1) Population at the beginning of period	(2) % natural growth	(3) natural growth	(4) Return of displaced & emigrants	(5) Population increase (3)+(4)	(1)+(5) Total population at end of period
Year 1	261 749	2,2 %	5 758	13 429	19 187	280 936
Year 2	280 936	2,2 %	6 181	13 429	19610	300 546
Year 3	300 546	2,2 %	6 612	6 113	12 725	313 271
Year 4	313 271	2,2 %	6 892	6 113	13 005	326 276
Year 5	326 276	2,2 %	7 178	6113	13 291	339 567
Year 6	339 567	2,0 %	6 791	0	6 791	346 358
Year 7	346 358	2,0 %	6 927	0	6 927	353 <b>2</b> 86
Year 8	353 286	2,0 %	7 066	0	7 066	360 351
Year 9	360 351	2,0 %	7 207	0	7 207	367 558
Year 10	367 558	2,0 %	7 351	0	7 351	374 910

The foundations of the dynamism are:

- the youth of the population;

- the well-rooted cultural tradition, including many intellectuals of high standing nationally and in the other Arabic countries;
- the high level of education, with a significant proportion of students having pursued university studies in Beirut while keeping strong links with the south;
- the support from a Diaspora in many countries around the world, especially in Africa and the United States. These immigrants have often become successful and are all still attached, if not to the south in general, at least to their villages of origin where they have generally conserved parental links and have some assets.

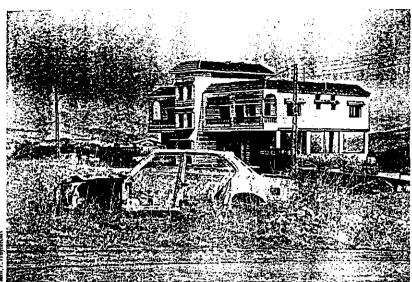


Selling of potatoes in a parking lot in Tyre, December 1998

# The Lebanese Diaspora originating from South Lebanon

Lebanese immigrants originating from South Lebanon are found practically in all the Lebanese communities established abroad. However, the favorite geographical zones of this migration are Western Africa and Michigan in the United States, followed by some European capitals, large cities in Canada and Australia, and the Arab-Gulf countries.

Lebanese people originating from the south form the majority of the Diaspora living in Africa and estimated to number over 250,000 Lebanese. The countries with the largest population are the Ivory Coast, Nigeria, Senegal, Gambia, Guinea (Conakry), Sierra Leone, Liberia, and the Congo. Many are entrepreneurs active in light industry and tend to maintain strong links with Lebanon and the south.



The construction of villas by returning emigrants from Africa testify to their attachment to their land of origin

- B1.2. Weaknesses and constraints
  This human potential, nevertheless, faces
  many weaknesses that should be addressed:
- an insufficient level of qualification of the workforce, especially for jobs requiring technical expertize and for jobs in the services sector due to the absence of industrial, commercial, and touristic activities in the region;
- poverty that affects a very large group of the population. One quarter of the households live with a monthly income of less than US\$330, and about 10% earn less than the minimum wage (US\$200);
- this poverty is expected to increase with the return of the displaced as it is expected that the returnees will be those who were not able to integrate socially in Beirut or abroad;

- the high rate of illiteracy, especially among women;
- conditions for women are among the least developed in Lebanon, with a low proportion of economically active women who work outside the family-owned agricultural establishments;
- the persistence of discord between villages and communities, at least for part of the population.

Added to the above, the South faces the following challenges which will characterize the period immediately following the cessation of the conflict, and which should be addressed:

- the real risk of losing the income of the persons currently living on the war economy or on allowances related to the conflict;
- the risk of failing to attract the best strata of those who left the south due to the region's incapability of assuring satisfactory housing conditions, children's schooling, or due to the unsatisfactory performance of basic services: water, electricity, solid waste disposal, sanitation, etc
- the risk of not creating enough jobs to correspond to the rapid growth in the population. In fact, the population growth during the 10 years following the cessation of the conflict (more than 113,000 supplementary inhabitants) should be translated through the creation of more than 60,000 supplementary jobs, taking into consideration the census on global activity rate (from 31% to 35%) with

T20. Job creation levels during the post-conflict period

In the 5 cazas	Year 1 71 000	Year 2 82 680	Year 3 87 000	Year 4 93 900	Year 5 101 060
1 - Jobs at the beginning of the period					
2 - Population at the beginning of the period	262 000	281 000	300 000	313 000	326 000
3 - Population growth	19 000	19 000	13 000	13 000	13 000
4 - Population at the end of the period (2+3)	281 000	300 000	313 000	326 000	339 000
5 - Activity rate	28 %	29 %	30 %	31 %	32 %
6 - Necessary jobs for the population at the end of the period	78 680	87 000	93 900	101 060	108 480
7 - Supplementary jobs (6-1)	7 680	4 320	6 900	7 160	7 420
8 - Jobs to compensate for those of the war economy	4 000	0	0	0	0
9 - Total creation of necessary jobs (7+8)	11 680	4 320	6 900	7 160	7 420
10 - Total jobs at the end of the period (1+9)	82 680	87 000	93 900	101 060	108 480

Source: Projections based on references by CRI & M.Jaber, 1998



# Human potential: strengths, weaknesses, opportunities, and constraints

#### Strengths

- Strong demographic growth
  - Youth
  - Cultural tradition
    - Educated elite
- Strong attachment to the region
  - Numerous cases of success
  - Diaspora ready to support

#### **Opportunities**

- Mobilizing Diaspora
- Mobilizing investors originating from the south

#### Weaknesses

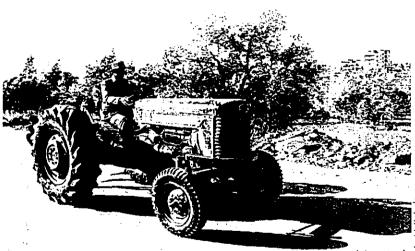
- Poor technical qualifications
  - Poverty
  - Illiteracy
  - Conditions of women
  - Persistence of discord

#### Constraints

- Loss of income related to the war economy
- Loss of subventions related to the conflict
- Weak attractiveness of the south for the favored strata
  - Difficulties in creating a sufficient number of jobs

the increased participation of women in the work force. In reality, the number of available jobs has to be higher in order to compensate for the loss of jobs in the activities related to the conflict. Created jobs should also aim at lowering the level of youth unemployment (24% among the 19-24 year olds).

T20 provides a summary of needed jobs for the five first years of the post-conflict period, emphasizing an average of 7,500 new jobs to be created each year, with a peak in the first year due to the necessity to reintegrate persons whose primary source of income was the war economy.



Much progress is needed to raise the level of professional qualifications, including for persons working in the agricultural sector



Olive trees in Bourghoz (caza of Jezzine)

# B2. The potential of agricultural development

Agricultural development is a strategic choice for Lebanon, and more particularly for South Lebanon for multiple reasons:

- Agriculture is primarily a productive sector, which satisfies part of local demand, reduces the need for import, and can even provide products for export. It is also the base of a developing industry. It is therefore a sector which participates in the equilibrium of the country;

- Agriculture plays a major social role since it provides jobs and food supply for the most unprivileged strata of the population.

- It is also the most appropriate form of space occupation and management which, without agricultural activity, will remain uncultivated and favorable for erosion and fires, in addition to its effect on the depopulation of villages which depend on agriculture as its principal activity. Hence, agriculture is a fundamental activity for the preserving of the quality of the environment:

- Agriculture ensures that water resources, which otherwise would be lost, are utilized.

In addition, agricultural development is not really about job creation. It is about South Lebanon in terms of maintaining jobs, reinforcing social development, space occupation, and environmental equilibrium.

B2.1. Strengths and opportunities

South Lebanon has at its disposal an important agricultural potential, with fertile land of which the most important are the coastal plain, the plain of Marjeyoun, and the valley of Hasbani. Elsewhere, agricultural land occupy small surfaces in valleys or in the immediate surroundings of the villages. Hills often serve as grazing grounds.

In addition to the coastal plain, already irrigated through Qasmieh-Ras el-Ain, and the valley of Hasbani, other lands that can be irrigated, within the framework of conveyor 800 using water from the Qaraoun dam, have a cumulative surface of 15,000 hectares.

Other land can be irrigated using the water from the Khardali dam, projected to be built on the course of the Litani at the lower part of the Beafort Castle, downstream from Oaraoun.

The proximity of big cities is also an important advantage for agricultural development, providing a ready market for produce.

The sunny and mild climate is also favorable to the production of a large variety of vegetables.

But the principal agricultural advantage in South Lebanon remains the availability of water resources.

In fact, South Lebanon profits from more favorable precipitation compared to the neighboring regions of the east and south. The average precipitation ranges from 1,250 mm/year in the mountainous regions of the caza of Marjeyoun to 700 mm/year in the caza of Tyre. The snow of Niha, Barouk, and Mount Hermon feeds sources, water streams, and water sheets that are used for irrigating South Lebanon.

Therefore, as in the rest of Lebanon, precipitation is unbalanced, with 93% supplied over six months, while consumption increases in the summer season.

The available sources are:

- The aquifers, which receive between 28% and 44% of the precipitation volume. Their potential of renewable stock, which should represent a few hundred thousand cubic meters per year, is not precisely known. The decree 14522 of 1970, which had fixed the general hydraulic evaluation for the central part of Lebanon (between Beirut and the frontier) has authorized a small part from the only coastal aquifer, 20 million m³ per year. The actual operation by the different drillings is not known. Good management of this resource will no doubt permit it to emerge as an important is-

sue, both for domestic needs and for irrigation.

- the sources that spring from these aquifers will be exploitable, according to the same decree 14522, at 83 million m³ per year;
- the expected dam in Khardali will have a capacity of 80 million m³ (decree 14522) which can be raised to 120 million m³;
- the Hasbani has an average yearly yield of 150 million m', of which Lebanon foresees using 59 million m' to satisfy the domestic, industrial, touristic, and irrigation needs in the valley of Hasbani.

We should point out the necessity of the revisiting the data of the decree 14522 of 1970 in order to take into consideration the intervening changes that occurred during the last 30 years, to include the Besri dam which was not planned at the time, and to consider the possibility of increasing the storage capacity of the dams at Khardali, as well as the possibility of finding other resources from aquifers.

To answer this necessity, the Litani Office has elaborated the terms of reference for reactivating the old hydro-agricultural developmental study of South Lebanon on water for non-agricultural usage.

The availability of water in South Lebanon is an advantage in a region where water is scarcefor agriculture, and where water is a priority for domestic and industrial usage.

For example, the Israeli agriculture has reached, after 50 years of supported expansion, a critical stage regarding water requirements. The agricultural sector is competing with the domestic and industrial needs, without taking into consideration that Israel is dangerously drawing on non-renewable underground water resources. Israel plans, by year 2020, to have halved the volume of water used for agricultural purposes while increasing cultivated areas by 18%. A similar approach, in the short term, is expected in Palestine and Jordan to satisfy domestic requirements which are a priority.

This is therefore an opporyunity for Lebanon in general and the South in particular to capture an increased part of the regional agricultural production.

Another opportunity is that the South will be able to develop a type of agriculture that is ecologically friendly at a time when possible negative effects of genetically modified produce are being debated, questioning methods used in Israel, for example.

# T21. Decree 14522 of May 16, 1970

Water allowances in the central regions of Lebanon located between Nahr Beirut and the southern frontier

140 Mm<sup>3</sup> (30 Mm<sup>3</sup> of Ogracial)

Allocation	of water
- Southern	Bekaa

TOTAL

- Journal Highway	140 (411)	(20 Mill of Gardoni)
- Western Canal	320 Mm³	(130 Mm³ of Qaraoun)
- Industrial and drinking water	50 Mm³	
TOTAL	510 Mm³	
Water origin		
- Sources of Southern-Bekaa	50 Mm³	
- Underground water of Southern Bel		
- Lake Qaraoun (for Bekaa)	30 Mm³	(Total Bekaa 140 Mm³)
- Lake Qaraoun (for Western Canal	) 130 Mm³	
- Sources of Ain Zarka (Litani)	20 Mm³	
- Tunnel of Markabi Jezzine	10 Mm³	
- Litani at estuary (Qasmieh)	17 Mm³	
- River of Awali	10 Mm³	
- Other sources	5 Mm³	
- River of Damour	5 Mm³	
- River of Beirut	5 Mm³	
- Zahrani and Abou El-Assouad	10 Mm³	
- Sources of Ras El-Ain	10 Mm³	
- Coastal underground water	20 Mm³	
- Blocking of Khardaleh	80 Mm³	
- Sources of Marjayoun	3 Mm³	
- Sources from tributaries to the	45 Mm <sup>3</sup>	(Total Western Canal
Litani River		320 Mm³ and 50 Mm³
·		for drinking water
		of Beirut)

510 Mm<sup>3</sup>

#### Cultivated fields

The three principal types of soil in South Lebanon are suitable for agricultural production provided they are enriched with phosphates and soil erosion is prevented:

- Red soil (Terra Rossa) is formed from hard limestone. It provides liberal covering on hills, erodes on slopes, but can reach 70cm deep in valleys. This soil is rich in limestone and has some organic material. It is clay-like (62% to 92%), making drainage difficult.

- Rendzine is formed from marly limestone, but has a low content of or-

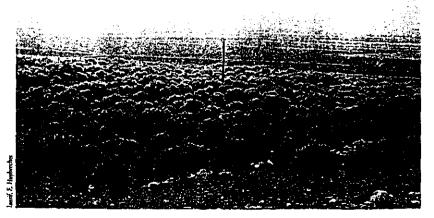
ganic materials.

- Alluvial soil is formed from sedimentation of rivers, erosion of nearby mountain rock, sea deposits, and sand.

In addition, there is soil from impermeable marno-limestone rock. This grayish-brown soil can reach a depth of one meter in valleys, but is more prone to erosion than Terra Rossa due to higher friability (ability to crumble). It is rich in limestone (35% to 60%) and low in organic material.

The mountainous sites are often rocky and totally deprived of arable soil, with the exception of some places where terrace cultivation has been correctly conserved.

Olives in Mari The further plain, the plain of Marjeyoun



#### B2.2. Weaknesses

The agricultural sector in South Lebanon is characterized by many weaknesses, which should be addressed.

The first weakness remains the necessary investment cost for irrigation projects. The strong concentration of precipitation over a short period of the year makes putting in place a policy for water reserves storage during the high seasons to fulfill the needs during the summer season a necessity. This can be done by the construction of dams and artificial lakes. Lake Qaraoun with a storage capacity of 220 million m<sup>3</sup> is an example. The water is intended to irrigate thousands of hectares during the summer season and the surplus used for hydro-electric power. In fact, electricity production has surpassed irrigation. This is also the spirit behind the second blocking on the Litani at the height of Khardali.

Water distribution should later be through several kilometers of pipes serving as local irrigation networks.

In total, the development projects from the Litani water for South Lebanon amount to more than US\$500 million (the needed water supply for industrial and domestic needs). Therefore, these projects can only be conceived over the long term.

The second weakness in the agricultural sector in South Lebanon is low productivity, partially due to the lack of water, and the absence of technical management from the Ministry of Agriculture and the National Institute of Agronomic Research during the Lebanese war. Agriculture is not highly mechanized; agricultural products do not always conform to international export norms; and irrigation, when present, is not practiced in an economical way.

Moreover, marketing channels, as much for the purchase of agricultural inputs as for trading, are rudimentary, of mediocre performance, and do not respect veterinarian norms, leading to a reduction in income for farmers.



In three cases out of four, marketing goes through two successive wholesalers instead of one. Animals for slaughter are first sold at a local market, then a central market before reaching the slaughterhouse. Carcasses are then sold to wholesalers who in turn resell to individual retailers. All these agents, of course, deduct their share of the profit.

Land is fragmented. The average farm located inland has 2.2 hectares and 5 hectares if it is on the coastal plain. A farm can have several land plots.

A difficult problem to solve is that South Lebanon is characterized by the omnipresence of tobacco cultivation which brings low revenue, but is strongly supported by the government for social and political reasons. Most tobacco growers are in the occupied zone.

Hence, here is a sustainable and very expensive exception: tobacco is bought from the farmers at a price five to six times higher than the market price. This acts as direct financial aid to the produced merchandize. It costs the state around US\$20 million per year for the five cazas.

# B2.3. Challenges

では、100mmのできる。これは、100mmのできる。 100mmのできる。 Agriculture in South Lebanon, as in other parts of the country, is threatened by competition from foreign producers.

For certain produce, Lebanon competes with less expensive Syrian, Jordanian, and Palestinian produce because of the difference in the cost of labor. It also competes with certain produce imported from Africa, Latin America, and even from some industrialized countries.

It is clear that South Lebanon (as will be the case with all other Lebanese regions) will also be in direct competition with Israeli and Palestinian produce when the frontiers open.

Syrian agriculture is essentially centered on cereals (3 tons of wheat per year, 1 ton of barley,

and 0.3 ton of corn), on sugarbeet (1.1 ton), and cotton (1 ton). Syria also produces apples, oranges, olives, grapes, tomatoes, and water melons in quantities that meet local needs and with low production costs compared to Lebanese produce.

Jordanian agriculture is more variant and generally produces no more than to satisfy the local market. Jordan, however, has an important production of tomatoes (double the Lebanese production) and of mandarins (2.6 times the Lebanese production) at lower costs. But Jordan can also re-export more competitive Palestinian produce and even Israeli produce.

Israel and the Palestinian Territories do not constitute serious competitors for Lebanon for fruits like apples, pears, apricots, grapes, or cherries. On the other hand, production of citrus fruit and water melons does not exceed domestic demand and is available at more competitive prices for equal or superior quality compared to Lebanese produce.

The important development of the Israeli aquatic culture, which produces 17,500 tons of fish per year (seven varieties, mainly carp and tilapia), against 7,290 tons in Syria and 375 tons in Lebanon, should also be noted.

The opening of frontiers between the countries of the Near East will have a definitive impact on Lebanon:

- the marketing of less rapidly perishable produce (essential for distributors) at more competitive prices, directly competing with locally grown produce (especially citrus fruit and vegetables);
- better utilization of agricultural land to serve a more demanding population;
- further integration of related activities such as storage, packaging, and transport.

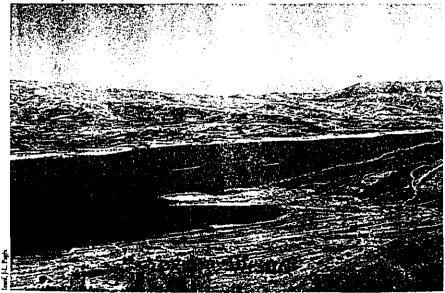
In the short term, the opening of the frontiers will threaten the non-structured low productive traditional exploitations of the competitive sector if no temporary protection measure is taken.



The plain of Marjeyoun

On the medium and long terms, Lebanon, and particularly South Lebanon, will be able to profit from a situation of free exchange of agricultural produce across the Near East. The Lebanese potential for agricultural production is not fully exploited yet, at a time when the needs in many countries of the region are growing, when these countries do not have the potential to grow for reason of land and water scarcity problems. But this potential for Lebanon will not be quickly realized, but needs investment to change agriculture into a high technology sector, allied to efficient logistic channels.







Agriculture in South Lebanon:Strengths, weaknesses, opportunities, and constraints

## Strengths

- Adequate areas suitable for cultivation
  - Availability of water
  - Attachment to the land
  - Agricultural tradition

## Weaknesses

High cost of irrigation infrastructure

- Weakness in the technical management
  - Disrespect for veterinary norms
    - Weak commercial channels
      - Land fragmentation
  - Vicious circle of tobacco cultivation
- Weakness in industrialized products
  - High rate of investment credit

#### **Opportunities**

• Reduction of production in the neighboring countries

#### Challenges

- Competition from countries with cheaper labor
  - Competition from countries with higher productivity

# Profile of Lebanese and Israeli agriculture

The Israeli agriculture is among the most competitive in the world. Few indicators are enough to verify this:

- Between 1948 and 1998, Israel increased cultivated areas from 165,000 hectares to 435,000 hectares. During the same period, agricultural productivity was increased 16-fold.
- Israeli agricultural production is valuated at US\$2 billion per year, of which 30% is for export, the remaining 70% satisfies the local demand.
- This production consumes 1.2 billion m³ of water yearly (75% of the net resources of water available in Israel), a quantity remaining nearly the same since 30 years despite the expansion in the area of cultivated land. It is supported by an active population of 73,000 persons.
- Development research plays an essential role in agricultural performance with a strong collaboration of governmental agencies, universities, industries, and cooperatives.
- The technological advancement in Israeli agriculture has allowed it to develop cooperation and training agreement with 60 countries worldwide.
- Israeli exports (US\$600 million per year) relate to the export of flowers (31%), benefitting from a collection, packaging, and special transportation mechanism (Agrexo, part government part private organization, operating air and port terminals), citrus fruit (18%), cultivation in open field (16%), other fruit (12%), products of animal origin (10%), vegetables (9%), and seeds and seedlings (4%).

In comparison, Lebanon has more favorable physical, climatic, and hydraulic conditions, and has an agricultural sector that has not developed during the same period, partly because of the conflict, but also because of the absence of significant support (contrary to the policies of its neighbors).

Some statistics on agriculture in Lebanon:

- 190,000 hectares cultivated lands, of which 88,000 are irrigated;
- A production evaluated to about US\$1.2 billion per year:
- 875 million m<sup>3</sup> of water (68% of the available net resources) is used by agriculture;
- An agricultural active population of about 80,000 persons.

These figures show the importance of the difference between the two countries: with an almost equal active population working in agriculture, Israel produces at a value superior to that of Lebanon by 66%, attained through cultivating 2.3 times more surfaces (in a country largely of desert), and using 37% more water for irrigation. Israeli agriculture supplies 70% of the local need of a population twice as numerous as that of Lebanon, and manages a balance between import and export of foodstuff, which is far from the case for Lebanon (the sum of only the Israeli agricultural exports is equivalent to 60% the sum of all the Lebanese exports in 1977).



Source of Hasbani (casa of Hasbaya)

# B3. The potential of tourist development

The tourist sector represents a major developmental potential for this region:

- It is an activity sector which can create jobs of all qualification levels: it is perfectly designated to create job opportunities in a very large spectrum of initial training;
- It is also a sector where women traditionally play a valorizing role, whether in cultural training, site preservation, or receiving and guiding visitors;
- It is a sector which can, if its development is well mastered, constitute a strong spur for the improvement of the natural and urban environment;
- Tourism also creates a strong link between the residents and their heritage, and to the outside world;
- It is, finally, a sector propitious to the expression of individual initiative and to the spirit of enterprise.

B3.1. Strengths and opportunities

The Near East is an important potential tourist region: The World Office of Tourism estimates that the number of tourists arriving to this region should increase from 7 million in 1990 to 14 million in 2000, and 21 million in 2010. Lebanon can capture a share of this market, and its beginnings seem encouraging with an increase from 90,000 tourists in 1992 to 315,000 in 1997.

South Lebanon has an important advantage constituted by the state of coast preservation (beaches and bordering nature areas), especially south of Tyre. The capacity to profit will depend on the imposed protection measures on this coast after the conflict.

South Lebanon has numerous archeological and historical sites and remains, principally in the city of Tyre. Measures to protect these sites and provide access and facilities are needed for the region to become competitive.

South Lebanon offers many sites superior in quality for ecological tourism compared to those in bordering countries, such as Mount Hermon, Jezzine, Marjeyoun, and also south of Tyre.

These tourist sites can be complemented by other leisure areas: parks for children, therapy centers, and casinos, similar to those in other countries to provide facilities for tourists. In these cases, it is the quality of the offer that precedes the demand and maintains it.

The diversity of the region's sites will attract a variety of tourists for a more even spread of arrivals. Weather conditions add to this advantage.

Other than the advantage of sites, tourism in South Lebanon can lean on:

- Tourism in Lebanon: in 1974, 22% of GNP came from tourism, with a concentration in Beirut (75%);
- The existence of active national tourism: the limited dimension of Lebanon makes the South easily accessible, even for week-ends, and the familial links provide comfort and respond to the local demand: in 1997, for example, 69% of the visitors to the sites of Saida and 61% of those of Tyre were Lebanese. This local demand can form the beginning of a more ambitious touristic sector development;

できたには大きの変形を変形をあることがあるというないできるというできませんだった。

- The multi-lingual tradition of the Lebanese people, which is an interesting advantage for receiving foreigners;
- The nature of needs in labor for tourism: these needs call for a very large range of qualifications and, subject to appropriate professional training, many economically active persons in South Lebanon can find jobs in this sector.

The investment capacity of the Lebanese diaspora brings advantage to the sector.

Likewise, the promotion of tourism in South Lebanon is a positive strategy:

- It leans on a market which is in constant

progression in regard to the world scale and the improvement in living standards;

- It minimizes the risks by targeting various clientele: Lebanese (likely to arrive before the withdrawal), Middle Eastern, and international;
- It has the effect of leveraging other activities: in particular fishing, quality agriculture, and crafts;
- It gives a positive value to the delay in development born from political and military situation: for example the existence on the non-urbanized coast and the preservation of inland sites in the country are consequences of the conflict, but are becoming favorable elements for the tourism:
- It constitutes a basic activity, allowing the South to get out of an economy of auto-sufficiency and to place itself on the national and international markets.

#### B3.2 Weaknesses and constraints

In return, South Lebanon should overcome a series of handicaps:

- International tourism is extremely sensitive to the insecurity (see the case of Egypt), the political situation, and the presence of mines;
- The quality of the environment is not excel-

The imperial track in Tyre



# Some ideas for private investment in tourism after the withdrawal

#### Weddings at Qana

More and more couples are seeking unique strongly symbolic frameworks to celebrate their wedding. Some cities around the world have succeeded in becoming privileged places for this type of events. Promoting Qana as a symbolic place of blessed marriages can lead to considerable quantity of related activities in hotels, restaurants, travel, selling of flowers, traditional crafts, photography, etc.

#### Stud farm near the Litani

To go for tours for an hour, far half a day, for hikes of several days or for training, an equestrian center equipped with accommodation facilities can attract a variant clientele, especially in the summer to explore the Litani Valley or the hills of Mount Hermon, located less than 90 minutes from Beirut.

#### Hermon 2500

Skiing on the slopes of Mount Hermon is a dream for many. What is needed is road access and facilities including a restaurant, accommodation, rental of equipment, and ski lifts to make the area a popular center for winter sport.

#### Boar hunting

For lovers of big game, the region located to the east of Naqoura can be managed as a protected nature reserve open to hunters at certain times of the year. An entrance fee would be charged and accommodation facilities provided. The project requires cooperation from the concerned municipalities.

#### Children's games

For families of Saida, Nabatiyeh, or Tyre, a common problem is: Where to take the children? Amusement parks, an aquatic center, and an autdoor fun center are ideas which can attract a big clientele.

#### Other ideas:

- a Grand Hotel in Tyre
- a holiday club at Nagoura
- a national museum of the antique water transport
- a casino in Tyre or in Khiam

#### THE TOURISTIC RESOURCES OF SOUTH LEBANON

Natural sites and landscapes:

Sites of natural beauty and interest:

- Kilometer-long stretches of sandy beaches south of Tyre, the only ones intact in Lebanon;
- Mount Hermon;
- Lake Qaraoun (possibility of developing a base of leisure and water activities);
- Nature areas (especially in Jezzine) still numerous contrary to the situation in most other Mediterranean countries;

Other sites that may become potential centers for tourism:

- Large cave at Doyr-Antar (Mgharet-Bzez);
- Caves in Jezzine (of Fakhreddine), Tiri, Debl, Chebaa;
- Waterfalls (40m) in Jezzine;
- Springs in Jarjour, Marjeyoun, Khiam (Dardara), Hamam, Chebaa;
- Artificial lake (near the Litani) in Anan;
- Mineral water at Ain Abou-Souar:
- Villages perched on the hills of Kawkaba and Sultan Jacob;
- Forests of Jabal Amel.

In addition, there are numerous sites and villages which used to be popular summer resorts because of the setting, climate, and tradition of welcomina visitors:

Jezzine and region, Roum, Bkessine, Benouati, Kfar-Houna, Aramta, Al-Rihan, Aychiye, Al-Jarmak, Mlikh, Lwayze, Jernaya, Jwaya, Tibnine, Ayn-Ibl, Hariss, Arab Salim, Jarjour, Ain bou-Swar, Jbaa, Marjeyoun, Ybl El-Saai, Hamam, Lake Qaraoun.

Archeological sites and patrimonial wealth

Archeological heritage:

- Antique compound of Tyre: hippodrome, aqueduct, necropolis, triumphal arch;
- Roman city of Tyre (forum, arena, Egyptian port, tracks paved with mosaic, thermal baths);
- Phoenician remains at Lebaa, Kfar-Jarra, Jezzine, Hanaway (tomb attributed to Hiram 1), Qana (high reliefs), Tell-Maachouk, Al-Kfour (Phoenician temple);
- Roman remains at Ras El-Ain (canalization), Debaal (necropolis),
   Bourj El-Chemali (funerary caves), Jarjouh (aqueduct of Zenobie),
   Jbass (tombs), Habbariye (temple ruin), Chebaa (temple), Ain-Horsha (temple), Aiha, Akbe (temple), Kfar-Quk (Roman temples), Mdoukha (temple), Nabi-Safa (temple);
- Remains of the Hellenistic period in Oumm Al-Aawamid;
- Archeological remains in Sultanie, Dayr-Antar, Hariss, Dibl, Dahr Yahoun (temple, columns, sarcophagus), Al-Kfayr (temple), Al-Chkif, Tall-Dibbin, Hasbaya.

Medieval heritage (Byzantine, Crusader, Mameluk):

- Castle of Beaufort (Chaif Arnoun);
- Castle of Tebnine;
- Citadel of Rachaya;
- Byzantine basilica of Tyre;
- Remains from the Crusaders in Jezzine, Anan (citadel of Abi el-Hasan), Chamaa (citadel), Bouri el-Chemali, Dayr-Kifa (citadel of Maron), Chagra (citadel), Doubbiye, Al-Kfour, Hasbaya;
- Byzantine remains at Anan, Leboa (St. John the Baptist church, 16th century, severely damaged by shelling), Qlayle, Oumm Al-Aawamid.

}

Traditional architecture (Ottoman period):

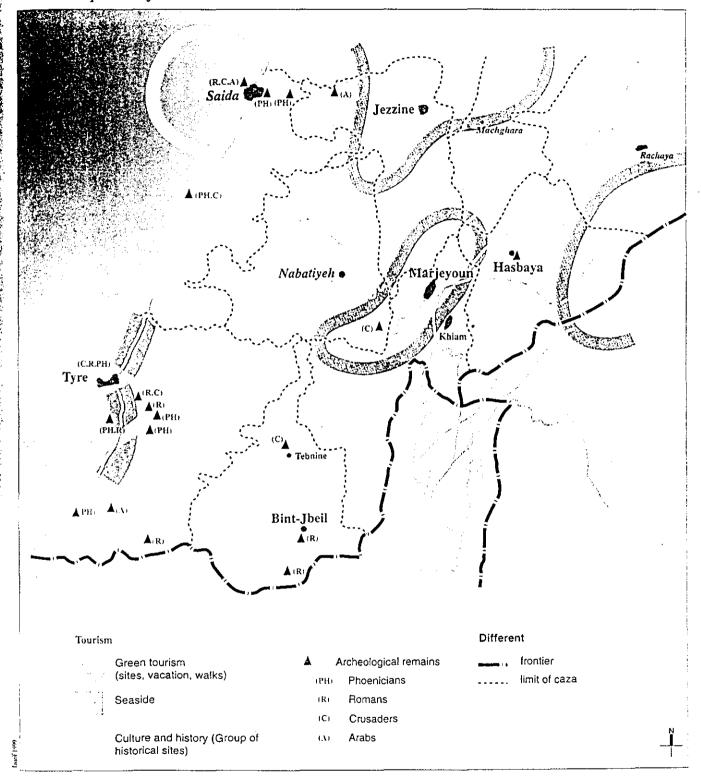
- Chehab Palace at Hasbaya;
- Farid Serhal Palace and museum in Jezzine;
- Seraglio (1898) in Jezzine;
- Old Khan at Souk El-Khan;
- Rachaya (souks and beautiful houses);
- Ancient city of Tyre;
- Ancient centers of Hasbaya, Marjeyoun, Jezzine.

Sites of religious pilgrimage:

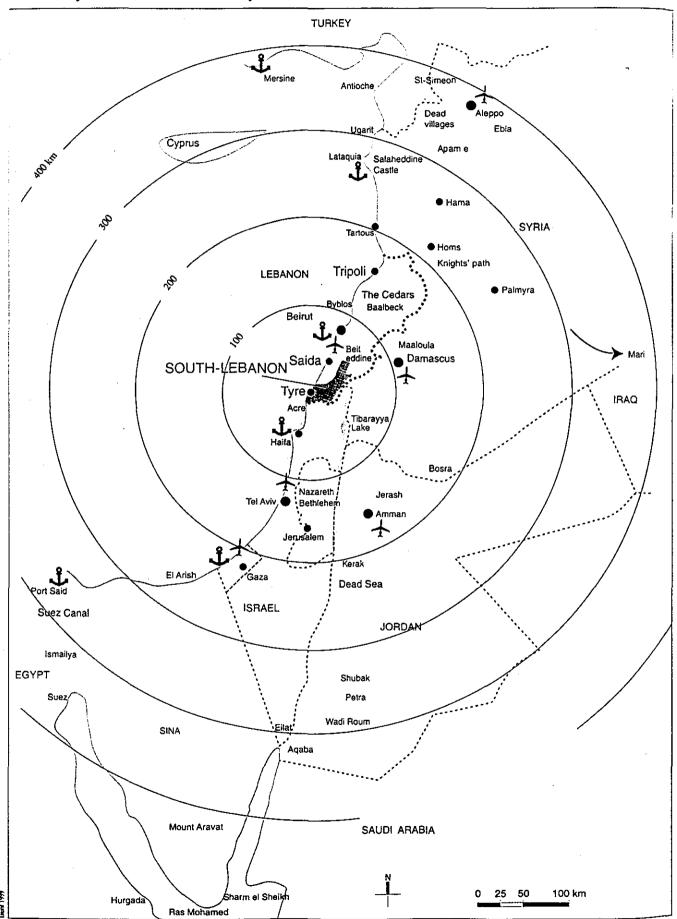
- Khalouat Al-Bayyada: religious center of the Druze community, at Mimes:
- Mausoleum of the Prophet Ezechiel near Marievoun:
- Qana, probably the site of Christ's first miracle: mausoleum of Galilee:
- Religious mausoleum at Qlayle (attributed to the Prophet Omran, father of the Virgin Mary):
- Mausoleum of Wali Tamim (Ottoman) at Dwayr;
- Ancient mosques in Jezzine, Bent-Jbeil, Tiri, Deir Antar, Nabatiyeh, Mays Al-Jabal (attributed to a companion of the Prophet, Abi-Zar al-Gharafi), Blida (18C) "Oratory of the Prophet" at Days-Ntar:
- Mausoleum in Dibl (laurel of the Prophet Hazour), Tell Maachouk, (of Cheikh Abbas el-Muhammad (18C);
- Tombs in the rocks in Habbouche, Al-Kfayr, Chagra;
- Ancient convent (18C, principal center of Maronite bishop of the region) in Machmouche;
- Mount Hermon, sacred mountain, temple:
- St. John the Baptist Church in Kfar-Jarra;
- St. Antoine Convent (1774) in Jezzine;
- Ruins of Convent in Deir-Ames, Jbaa.



# F12. Tourism potential of South Lebanon



F13. The major historical and cultural sites of the Middle East



A STATE OF THE STA



lent: seaside tourism will not adapt well because of pollution;

- The actual deficit in infrastructure and services (hotel management);
- The image of South Lebanon, attached to the conflict, should be overcome, not excluding the presentation of historical events and certain remnants of the conflict as a possible center of interests for certain visitors, by gathering them in a symbolic place.

Another fear is to see tourism developing which faces deployment situated in neighboring regions, and in the case of South Lebanon, because of the lack in strategy, a tourism limited to daily visits where tourists return to their bases after every visit.

Finally, for ecological tourism, possible competition from the Golan, that is close and preserved, as well as mountain zones of the rest of Lebanon, in particular those yet preserved in the northern and southern parts of the Mount Lebanon chain should be taken into consideration.

The touristic policy to be put in action should in other respects respond to four previous questions:

- To lead a "cultural revolution" to allow the Lebanese of the South to appreciate their proper heritage of which Roman or Crusaders remains are not considered part of their proper heritage. The same, the concerned populations' state of mind should form a harmonious cohabitation with the foreign visitors.
- To attach oneself to spread the touristic development inland (and not only on the coast) to avoid spatial unbalance contrary to the principle of balanced regional development: green tourism, summer vacations to counter-balance the attraction of the sites like Tyre and those of the beaches.
- To coordinate public and private action: at the public level, protection, archeological research, services, actions of training and promotion; coupled with actions at the private level including, hotel facilities, transportation enterprises, and attractions. The financial capacity of the public sector is limited and actions aim-

ing at touristic development can be handed over to the private sector.

- To create the needed performance: creating hotel equipment based on adequate levels of service and qualification as needed. The valorization of sites (natural or cultural) is to be done: protection of sites, access facilities (lights, parking), quality of receiving (cultural content, opening, subsidiary services).

Crusader Palace of Tebnine (caza of Bint-Jbeil)



Tourism in South Lebanon: Strengths, weaknesses, opportunities, and constraints

# Strengths

- Archeological remnants of Tyre
  - Other patrimonial wealth
    - Beach of Tyre
    - Lake Qaraoun
    - Mount Lebanon
- Summer regions of Jezzine and Marjeyoun
- Holiday makers originating from the South
  - Lebanese touristic tradition

### **Opportunities**

- Flow of tourists towards the Near East
- Complementing neighboring countries

#### Weaknesses

- Image of the conflict
  - Mined zones
- Degradation of the environment
  - State of basic infrastructure
- Absence of marketing and advertisement
  - Absence of tourist facilities

#### Constraints

- Tourists on day trips only
- Competition from North and
   Mount Lebanon
- Competition from Golan for ecological tourism
- Competition from the Israeli coast and the Galilee

# **B4.** The potential of industrial and commercial development

Industrial and tertiary sectors are essential for job creation in sufficient numbers for the population of this region. This population is characterized by a rapid growth of the number of youth in the age group of economic activity and by expected population growth as a result of the return of the displaced and immigrants at the end of the conflict.

The tertiary and industrial activity can rest partially on the agricultural economy, dominating today, or tourism, called to develop the region after the conflict. However, besides these basic activities, there exist in this region activities attached to the population. The development of these activities will depend on the local demand.

Industry and Services in South Lebanon: strengths, opportunities, weaknesses, and constraints

# Strengths

- Well situated urban centers
- Significant unserved population
  - Low cost of land
- Young and dynamic workforce
- Investors originating from South Lebanon

## Opportunities

- Re-opening of communication networks
  - Sites of reconstruction
  - Present weak competition
- Positive effects resulting from the conflict
- Creation of enterprises along with the
- returns

#### Weaknesses

- Absence of industrial and commercial tradition
- Poor training level of the workforce
- Degraded state of the infrastructure
- Antiquated state of the commercial circuits
- Lack of respect for norms and regulations

#### Constraints

- Competition from other economic regions
  - Risk of not profiting from the reconstruction

# B4.1. Strengths and opportunities

South Lebanon does not lack the potential of attracting commercial and industrial investments: enterprises numbering which 5,000 function in the secondary sector and more than 20,000 in the tertiary one. Most are very small (90% have less than five employees), constituting a support system to lean on. Three cities, Saida, Tyre and Nabatiyeh, which together have 80% of these enterprises, constitute the urban network from which an economical life can be developed.

Also, the principal advantages of South Lebanon are:

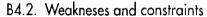
- Its major urban centers, Saida, Tyre and Nabatiyeh, which have become well linked to Beirut, its port, its airport, and its market which is essential for a good number of services and commercial activities;
- These same poles serve a population of half a million inhabitants, constituting a considerable market:
- The price of land is clearly lower than in the capital city, and the available space is in abundance, which is important for potential industrial development. The non-built-up areas in the industrial zones amount to 50 hectares, of which 28 hectares are in Saida and 13 hectares are in Tyre. Thus, extensions are possible on about a further 60 hectares;
- The workforce is young and dynamic;
- A number of investors originating from the South will probably be disposed to establish businesses there.

Because of the growth, the ending of the conflict will provide numerous opportunities that the South should be able to seize:

- The re-opening of the road networks is vital for re-launching the exchanges between the occupied and non-occupied zones, between the South and Bekaa and, beyond, with Syria and other Arab countries accessible by road;
- In the industrial sector, two activities induced by the return to peace will emerge:
- 1. The sites of reconstruction, which will supply an exceptional opportunity for the creation of a network of small enterprises for construction and public work, assuring numerous jobs

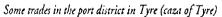
for the local populations;

- 2. Active road traffic which will engender maintenance activities as well as auxiliary transport services;
- Poor development of commercial services inland is an opportunity to be seized for the producers of such services: the land is, so to say, practically virgin;
- The effect "exit from conflict" could be profited from to attract investments:
- The return of the population will be partially accompanied by the establishment of enterprises.



There are several economic restraints which characterize South Lebanon and which should be overcome if development is to be favored:

- The absence of commercial and industrial tradition: the South is primarily an agricultural region;
- The importance of the activities attached to the political situation: these activities will disappear with the liberation of South Lebanon. The sector of Marjeyoun is particularly fragile on this point;
- The low level of technical training for the young, whether in office automation, management, trade, or mastering of industrial and craft jobs;
- The degraded state of the infrastructure: road networks inland, electricity, running water, etc;







Automobile garage in Zrarie (caza of Tyre)

- Archaic state of the commercial channels: no logistic support, numerous intermediaries, etc;
- The lack of respect for rules and regulations: an important informal sector, non-adherence to veterinary norms, commercial channels often opaque.

To this, other challenges are added:

- The weak economic performance of South Lebanon compared to better structured and more competitive regional economies in Beirut and even in the Bekaa;
- The risk that employment opportunities on reconstruction sites will be taken by job seekers from elsewhere.

In order to face these structural weaknesses of South Lebanon's economy, (with the exception of agriculture and tourism, which enhance specific policies), the most constructive attitude is to create a favorable environment for such initiatives, by acting upwards on the conditions of enterprises functioning. During the last years, Nabatiyeh has developed through receiving people and companies escaping from the occupied zone: the return of peace can favor an analogous process over the whole of South Lebanon.

South Lebanon: synthesis of strengths, weaknesses, opportunities, and constraints

#### Strengths

Numerous population
Strong demographic growth
Young population
Cultural tradition and educated elite
Attachment to the region
Numerous cases of successes
Diaspora ready to support
Tourists originating from the South visiting during summer
Tourism
Agricultural tradition

Well located urban major centers Slightly elevated land prices Large areable land Availability of water

Natural heritage
Archeological sites in Tyre
Other patrimonial wealth
Beaches at Tyre
Lake Qaraoun
Mount Hermon
Summer regions of Jezzine and Marjeyoun

#### Weaknesses

Work force with poor technical qualifications
Poverty
Illiteracy
Conditions for women
Persistence of discord

Poor technical and administrative management Lack of respect for rules and regulations

Negative image of the conflict

Mined zones
Degradation of the environment
State of basic infrastructure

High cost of infrastructure necessary for the irrigation
Lack of respect for veterinary norms
Land fragmentation
Vicious circle of tobacco cultivation

Absence of tourist facilities

Absence of commercial and industrial tradition Archaic state of commercial channels

# **Opportunities**

Diaspora that can be mobilized
Investors originating from the South who can be mobilized
Positive effects resulting from the end of the conflict
Creation of enterprises accompanying the return of the displaced
Reconstruction sites
Present weak competition

Cooperation with neighboring countries in agricultural production

Increased tourism to the Near East
Tourist activities complement those of neighboring countries

#### **Constraints**

Loss of income for people living on the war economy

Weak attractiveness of the South for middle classes Difficulty to created sufficient jobs

Competition over agricultural products

Day tourism
Competition from Mount Lebanon
Competition from Golan
Competition from the Israeli seaside

Competition from other regional economics



## B5. The strengths, weaknesses, opportunities, and constraints: synthesis

In conclusion of this review of principal data relative to the region and its developmental potential in different sectors, it is possible to bring out an objective and global vision of the strengths, weaknesses, opportunities, and constraints facing South Lebanon.

This analysis is essential. The development programme which would be established should lean on the strong points and take advantage of them to the benefit of a balanced, ambitious, and durable growth. At the same time, the program should attenuate the weaknesses and thwart the potential threats.

The table opposite synthesizes the sectoral analysis of the previous sections.

The analysis clearly indicates that public action is necessary to value the strong points, to seize the opportunities, to overcome the weaknesses and to rise to the challenges in six main domains, including:

- 1. The support to the economical development of the region;
- 2. The rehabilitation of the environment and of the sites:
- 3. The development of infrastructure and services:
- 4. The rehabilitation of human resources;
- 5. The rehabilitation of the administrative management;
- 6. The mobilization of means and actions for promotion.

These domains cover the totality of the stakes, which can be deduced from the analysis previously carried out.

They correspond, at the same time, to areas of action with the spirit of partnership (with other economic partners, the formation of establishments, etc) and its proper intervention tools.

The following section will aim at identifying the necessary actions in each of these six domains in order to support the development of South Lebanon.

# C. THE PROJECT: Objectives, priorities and main axis of the regional development programme

Based on the actual situation as addressed in Section A, and the development potential analyzed in Section B, it is possible to define the big axis of what should be an integrated development programme for South Lebanon, taking into consideration the objectives and priorities stipulated by the Lebanese government.

As previously indicated, this programme should have complementary actions in the following six domains:

- the economical development of the region;
- the rehabilitation of the environment and sites:
- the development of infrastructure and services;
- the rehabilitation of human resources;
- -the rehabilitation of administrative management;
- the mobilization of means and actions of promotion.

Development actions should lead to the realization of the general objectives stipulated by the government, namely: assuring the prosperity of this region, the security of its people, and the full integration of South Lebanon into the heart of the national community.

These actions should also respond to the priorities fixed by the government, namely: the fight against poverty, the reinforcement of the civil society, the improvement of conditions for women, the encouragement of individual initiative, and the preservation of the environment.

The aim of the present section is to present the orientations, which follow, from these objectives and priorities, and to develop the main axis of the development programme in each stated sector of action. Each phase of operation of this programme will be detailed in Section D.

## C1. The objectives and priorities of the development programme

C1.1. The objectives

Three important objectives have been assigned to this development programme:

ì

- Prosperity: To give the South the capacity of taking the responsibility for its own actions on the economical plan, and to progress on the social plan;
- Security: To assure civil peace, and to guarantee the security of people and property;
- Integration: To reinforce the South as a part of the national territory, to provide it with the same chances and the same level of infrastructure to better relate to the other regions of the country.

It is thus important to define the means of realizing these objectives, which are strongly dependent on one another.

Prosperity is essentially attached to economic development: in agriculture, which should be modernized with diversified production and increased productivity; in tourism, destined for a promising future in the region as a result of site preservation, organizational and promotional efforts; and in industry and services, yet to be developed in the region.

But the objective of prosperity requires also an improvement in the performance of the principal infrastructure of communications and energy distribution: roads, telecommunications, and electricity, in addition to irrigation infrastructure essential for increasing productivity to ensure gains in the agricultural domain and a progressive shift from to-bacco cultivation.

Finally, prosperity demands an accompaniment of economic development with a rise in the level of education and professional train-



ing, an improvement in the effectiveness of administrative services, and a guarantee of the security of persons and properties, and the repression of fraudulent behavior.

Security and peace cannot be guaranteed to last if they only rely upon the political consensus and the presence of the state militants. A lasting peace will, in fact, depend on the progressive improvement in living standards, the solving of social problems coupled with the improved educational levels, poverty and ignorance being classical sources of tensions, conflicts, and insecurity.

Security demands, in other regards, measures proper to its domain: mine clearance of sites, deployment of the army and the state police forces, military police, and repression of fraudulent behavor.

The integration of the South into the national entity is, finally, essentially attached to the capacity of offering the region an economical level of infrastructure, equipment and access to health and education, comparable to those in other parts of Lebanon. It is this equality of opportunities that, no doubt, will constitute the best guarantee for peace and stability in that region.

#### C1.2. Priorities

The Lebanese government stated, during the preparatory work for the elaboration of the actual programme, a group of priorities which should lead the definition of actions to be undertaken, and which should serve as a base to manage these actions.

Those priorities were stated as follow:

- the fight against poverty;
- the reinforcement of the civil society and the civic spirit;
- the improving of conditions for women;
- the encouragement of private initiative;
- the preservation of natural resources and the environment.



Public garden in Tyre, rehabilitated in 1998

It is possible to determine the principal fields on which public action should address to respond to these priorities.

For the fight against poverty

- Modernization and diversification of the agricultural and fishing and fish-farming sectors:
- Irrigation projects which allow the improvement in productivity;
- Development of new job opportunities for the youth in services, industry, and tourism sectors;
- Professional training in a variety of areas which correspond to the actual and future demand in the job market, linked to a system for placing young graduates from these training courses in jobs in companies;
- Opening up of opportunities for women to enter the workforce, permitting them to contribute to the household income:
- Support for orphans, one-parent families, handicapped, freed prisoners, and the displaced, all threatened by deprivation of economic resources.

## For the reinforcement of civil society and the civic spirit

- Regrouping of scholastic curricula, which will allow re-integration of the youth coming from many villages;
- The same type of unity in training sessions;
- Holiday centers regrouping children and youngsters from South Lebanon and other regions;
- Promotion of cultural events and training in tourism;
- Execution of regional markets;
- Improvement of communication means between villages, and from urban centers to outlying villages;
- Support of local life and municipal action;
- Actions in environment preservations, the rehabilitation of historical sites, and the beautification of cities.

## For the improvement in conditions for women

- Literacy training targeting women, offering them new perspectives of activity, access to knowledge and information, and social promotion;
- Support to one-parent families, mostly headed by a single mother, by assisting them in education and child-care;
- Development of new economic activities using female skills, in particular in areas of tourism training and site management;
- The progressive change from tobacco cultivation, particularly time-consuming for women working in this cultivation;
- Ensuring the supply of potable water to all villages, which will free women from having to ollect water, one of their responsibilities in the rural economy;
- Diversified training, which will allow women to enlarge their professional horizons.

## For the encouragement of initiative

- Support to the creation of enterprises by a system of improved loans and juridical and

#### administrative assistance;

- Support of investments in general through improved loans and promotion campaigns of investment opportunities;
- Improvement of enterprises through creating activity zones and helping the creation of activity locations;
- Improvement of the general environment of economic activity and investment through the rehabilitation and modernization of communications and energy distribution networks;
- Priority given to assist persons deprived from resources at the end of the conflict to acquire needed qualifications to allow them to create their own enterprises;
- Support to the trading of local products through organizing marketing channels and promotional activities.

## For the preservation and valorization of the environment:

- Rationalization of the management of water resources by qualitative and quantitative follow-up of springs, streams, and underground basins, in addition to water usage;
- Promotion of water management approaches in cooperation with all actors;
- Reforestation and the measures of fight against erosion;
- Realization of infrastructure and necessary networks in sanitation materials;
- Introduction of statutory measures at major tourist sites and the protection of natural sites;
- Improvement of municipal techniques of collection and treatment of solid waste.

The proposed programme will also be essentially founded on these priority actions and a plan of evaluation will be proposed to measure the evolution of different indicators with regard to these priorities.

## C2. Support to economic development

The first axis of the development programme should evidently be the economy of the region.

As previously indicated, this development concerns:

- The development of industrial and tertiary enterprises, which will supply the demand in job creation;
- The progressive development of tourism;
- The modernization of agriculture.

Improving economic activity in these sectors will demand a direct support from the state, at least for a few years.

The proposed actions were divided into two parts, the first concerning industry and tertiary enterprises, whereas the second deals with agriculture, taking into consideration the strong specificity of this sector.

C2.1. Support to the development of commercial and industrial enterprises

New job creation will primarily focus on the services and industrial sectors, jobs in small and medium enterprises, and jobs located in the cities.

The target activity sectors are:

- Jobs in reconstruction: projects of roads, irrigation, sanitation, housing units, schools, etc. The means to employ local labor, through the constitution of a network of building enterprises capable of correctly assuring sub-contracted tasks.
- Tourism: hotels to be established near the sites: the range of activities and jobs in this sector is exceptionally wide. Investing will also have a natural tendency to head in priority towards the enterprises of tourism and leisure, as soon as circumstances permit.
- Small industry and craft: traditional crafts, local factories for clothes, tools, locks, processing of agricultural produce, etc. These traditions are still alive and should be supported by commercial channels.

- New industrial activities: assembling of electronic components, for example, and other types of industry not requiring heavy investment.
- Office work: banks, insurance, travel agencies, etc. These are actually concentrated in Tyre, Saida, and Nabatiyeh. They can spread to other smaller cities (one or two per caza).
- Small trade, in the city and in rural environment, which will develop in proportion with the improvement in living standards, based on the intensity of the tourist flow and road transit.
- Services to persons: transportation, deliveries, cleaning, educational support, etc. This type of activities depends on the living standards of the residents. The more the region knows how to attract staff and superior professions, the more this type of services will be spread and be profitable.
- Services to vehicles: reparations, trade, cleaning.
- Services to enterprises: subcontracting of management, office automation, etc.

The encouragement of these activities and job creation initiatives demands putting into action a coherent programme, including finance, training, and enterprise development. The suggested programme should include adequate measures in the following domains:

#### - Helping the creation of enterprises

The creation of enterprises will be the principal generator of economical development and job creation. Therefore, it deserves strong support in the framework of the foreseen programme.

This support includes training and advising, administrative, juridical, and financial support. It can take the form of physical assistance through the provision of premises and computers to create a "nursery of enterprises", a concept successfully experimented in Europe many years ago.

This entirety of this action could be undertaken in partnership with the Chamber of



A bank in Tyre

Commerce, or with a training establishment specialized in management and commercial affairs. Public financing will go to equipping the premises, and to financing the training of counselors and the reimbursement of the remuneration of these counselors for a limited period of time. This project could be coupled with a training cycle initiated by the Chamber of Commerce, or a partner establishment who will recover the budget for this activity through advising on the creation of enterprises in a few years.

## The nurseries of enterprises

A nursery of enterprises is a temporary receiving structure (23 months in France) targeting new companies being set up which are either enterprises of high technology or other types of businesses.

The nursery has four functions:

- Real estate function: small premises leased at prices lower than the market price, subsidized through grants from public finances.

- A basic servicing function which puts at the disposal of the entrepreneur common services, invoiced at real cost, but which acquisition will be very expensive if done by each enterprise alone (standard, fax, photocopy, etc).

- An advising function, which helps the entrepreneurs occupied with managerial tasks: administrative formalities and arrangement of financial files, for example.

- A function of direction and training. It is the role of the trainer of the nursery: management of the nursery, exchanges between the enterprises, exterior relations.

An example: "Promopole", in the new city of Saint-Quentin-en-Yvelines, south-west of Paris

Created in 1987, the nursery is located in an activity zone.

The buildings cover 5,800 m², divided into 100 lots of which 80% are occupied. One half of the enterprises are in the data processing sector, whereas the rest are involved in activities less high tech.

Common facilities include secretarial servicies (bilingual), a restaurant, and three conference rooms. Costs are partly on contractual basis, and partly pro rata.

Fiscal and management advice, as well as an economical documentation, is also provided.

"Promopole" is the most important nursery in France.

This is, hence, a programme which contains, for the public part, a share of investment of US\$500,000 in total and a yearly operating cost of US\$300,000 for the following few years. It is possible to start at reduced capacity during the present situation (during the period of conflict), and switch to full capacity after the end of the conflict, with public support during the latter phase which may last for five years.

This "nursery of enterprises" could be coupled with a partnership between the nursery and the administrations in charge of delivering the different authorizations for the creation of enterprises, which will simplify the creation of enterprises in these different administrations.

#### - Credit to the entrepreneurs

Investment is particularly sensitive to the conditions of bank loans. Lebanon has been witnessing, during the past few years, an unfavorable situation characterized by high interest rates (12% to 15%). It will, therefore, be hopeful to create a favorable system of loans for certain categories of projects to be put in place in partnership with the banking sector, as long as the conjuncture of high interest rates persists. The projects to be selected in this framework should evidently have a strong impact on the local employment or rural development. The cost of public finance will be low, but will provide a considerable effect of support: in decreasing interest rates, over a year, from 12% (current actual rate) to 5%. A public spending of US\$7,000 could unblock an investment of US\$100,000, hence creating a strong incitement to enterpreneurship.

This type of support currently exists for industrial enterprises that accept to settle in certain managed zones, to the terms of the decree 6549. It is convenient to put in place a similar system for service enterprises and industries in the food sector outside the urban industrial zones being established in the South.



The development programme should proceed by calling for projects, and each year selecting those projects which have the highest impact in terms of job creation, social integration and diversity of activity. For 10 projects selected each year, public financing will improve the interest of seven points for loans of US\$200,000 per project of three years duration. The cost of this measure will amount to US\$500,000 per year, including management fees, follow-up, and control costs.

This policy of support to investments should be limited in time. It will be able to cover the first five years following the Israeli withdrawal and the end of the conflict.

#### - Micro-credit

It is important to grant special interest to micro-credit to allow the access of entrepreneurs who cannot present the necessary guarantees for regular loans. Some NGOs in the South have already successfully experimented with this type of loan provision, for an average amount of US\$2,000 over six to 12 months at market interest rates, covered by the guarantee of friends or family. These included enterprises in catering, trade, mechanics, and construction.

Other NGOs practice even more modest micro-credits, getting down to US\$200 over six months, enough to start a craft or commercial activity.

The development programme can indicate one of its fixed objectives for its policy of micro-credit, to deal with thousands of demands per year. Public spending, which will serve to cover payment defaults (funds of guarantee) and to cover administration costs, should be at the average of US\$250,000 per year.

- Assistance to the management of activity zones In order to encourage industrial investment, a system of support for the management of activity zones for large and small-scale industries should be anticipated. In this type of action, public credit is generally given for premises for the setting-up of businesses. This type of support can be engaged in the South by making the unlimited industrial zones by IDAL more attractive, or to support the regrouping of craftsmen in certain localities.

The cost of such servicing is estimated at US\$15 per m<sup>2</sup>. A line of work credit in the order of US\$50,000 per year can be provided for this action, corresponding to an average of 3000 m<sup>2</sup> of serviced land per year.

## - Promotion of tourism among residents

The formulas of "bed and breakfast" currently being developed in other Lebanese regions deserve to be developed in South Lebanon, for week-ends and summer visits. These formulas bring direct incomes to the residents handling a minor investment. They also participate, in general, in the improvement of the quality of welcoming and the environment of life.

Similar formulas can be encouraged for communities of fishermen, including sea trips for holiday-makers. The support of these formulas passes through procedures of labeling and launching of promotional information.

The programme of development could support such promotion if it is led by a non-profit-making association, by a consular chamber or by a public institution. This support could concern the preliminary studies of the project, the constitution of the needed database, the call for candidature or prospect-

Impact of the proposed actions on the priority objectives

	Poverty	Givil Society	Conditions for Women	Environment	Private Initiative	Global Impact
Micro-credit	***	**	**		**	A
Rural resting places	***	**	**		**	A
Nursery and advice	**	*	*	- 1	***	В
Credit to entrepreneurs	**	*	*		***	В
Activity zones	*	*		*	4==	(

ing, the assessment of premises offered by candidates, and the placement of a branch of information. This aid can be raised after a call for project to select the carrying organism. A credit of US\$500,000 can be granted to this project, which can be started immediately after the end of the Israeli withdrawal.

These different elements militate in favor of the creation of a resources center dedicated to supporting economic activity in South Lebanon. Such a center can be created in partnership with the Chamber of Commerce, and would supply the following services:

- Service of "nursery of initiative" consisting of receiving the entrepreneurs, supplying them with juridical support, office work, and management assistance during the period of project set-up;
- Assistance to credit seekers: other than the formulas initiated by the government, this service will offer an accommodation to NGOs which have micro-credit projects.
- Assistance to entrepreneurs in obtaining information on the potential of development in the South, including the management of action related to the creation of zones and activity premises. This third service can, in other respects, get involved in promotion actions of the South for the investors.

T22. Support actions to industrial and tertiary enterprises under the development programme

Line of action	Indicative cost of the action: Initial investment (USS)	Indicative cost of the action: Yearly spending (USS)	Remarks
Nursery and advice	500 000 over 2 years	300 000/year	
Credit to entrepreneurs		500 000/year	
Micro-credit		250 000/year	
Activity premises		50 000/year	<u> </u>
Rural resting places	500 000		Spending over 3 years after the end of conflict

C2.2. Support to agriculture

Support to the agricultural sector, considering its specific character, necessitates a very strong implication of the Ministry of Agriculture starting at the early phases of the development programme, whatever is the actual level of efficiency of the decentralized services of this ministry. It can even be affirmed that there cannot be an agricultural development without the reconstruction of the administration which should supervise it. The rehabilitation of the means of this administration will later be presented in the framework of this section.

The lines of action, which founded the agricultural development strategy, can be presented as follows:

Irrigation projects

Irrigation is in the heart of socio-economic development of South Lebanon. In fact, water allows multiplication of the net income of the farmers by two or three times, noting that farmers nearly constitute half of the active population in the studied zone, and that non-irrigated cultivation is practiced by the poorest population.

Therefore, there cannot be true perspectives of modernization of agriculture and rural development without irrigation.

Lands which can be irrigated in the middle part of Lebanon (between Beirut and frontier) have been evaluated at 75,000 hectares, of which 50,000 hectares fall under the quota 800 by the Litani Office (evaluation dating from the 1960s). The decree 14522 of 16/05/70 has secured the project of irrigating, among those lands, with a total of 33000 hectare, taking into consideration available quantities of water.

Where South Lebanon is more particularly concerned, the Lebanese government has definitely opted, on October 15, 1966, for the irrigation of those lands located under the 800 quota with water from Lake Qaraoun. On August 29, 1973, the Council of Ministers took the decision to initiate the first stage of this irrigation project for a total of



10,000 hectares. On March 13, 1974, the government budgeted LP191 million for the execution of the first part for irrigating the lands in the cazas of Marjeyoun and Bint-Jbeil. This project was in the phase of award preparation at the moment when the Lebanese war started, and has not been resumed.

The irrigation project of South Lebanon was restudied in the Litani Office and in CDR. It still aims at achieving the hydraulic equipment of 15,000 hectares, of which 13,400 are in South Litani and 1,600 in North Litani in the zone of Nabatiyeh.

The principal feeding canal, of 56km, should drive water from Lake Qaraoun to the village of Bracchit (altitude 750m). This canal should supply 100 million m' of water per year, both for irrigation and drinking purposes.

For the region of Nabatiyeh, the solution which should link this region to the feeder canal at the height of Khardali, the subject of a present evaluation, is to realize a second canal, of 23km length, independent from the first feeder canal, driving water from Lake Anan (600m). This will allow the irrigation of 3,150 hectares and will provide water to 43 villages in the caza of Nabatiyeh. This will allow to reserve all the water of the Conveyor 800 to the regions situated in South Litani.

Today, this irrigation project represent an investment cost of US\$400 million, covering the cost of the feeding canals, secondary network and needed equipment. It is important to note that this project does not only concern irrigation, where more than the quarter of the driven water will feed drinking water for 88 localities in South Litani and of 44 in North Litani.

The extension of irrigated surfaces will be a strong developmental factor. It offers, in other respects, the opportunity to begin the replacement of tobacco cultivation by irrigated cultivation of substitution crops, which

will reduce the weight of the tobacco cultivation on the public budget, and improve the living conditions of the farmers involved in this cultivation that is very demanding.

The execution of the irrigation project of South Lebanon from the Litani water risks taking many years (10 to 13 years according to present actual evaluation), before water gets to the most remote villages. This project should be conjugated with other more modest, but nevertheless efficient and practical, projects. Management of the retained rain water in the hilly lakes sounds to be the most appropriate solution in these remote areas.

Eleven sites susceptible of receiving such lakes have been counted in the framework of a study carried out by Dar Al-Handasah for the Republic of Lebation

Republic of Lebation

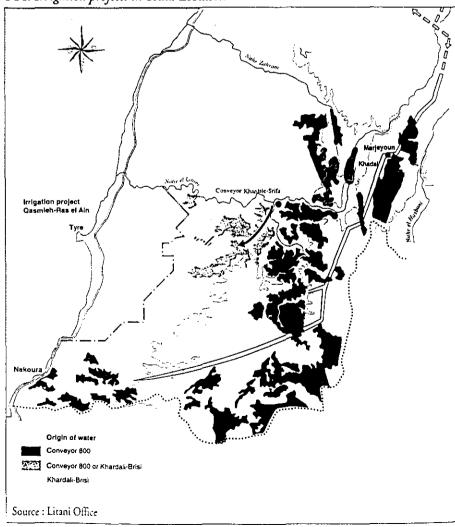
Office of the Minister of State for Administrative Reform

Office of the Minister of State for Administrative Reform

Office of the Minister of State for Administrative Reform

Office of the Minister of State (C.P.S.P.S.)

F14. Irrigation projects in South Lebanon





Council for the South in 1972. They represent in total a storage capacity 2 million m<sup>3</sup>, and can supply water to 12 villages for the irrigation of 500 hectares.

The management cost of each of these lakes is about USS300,000. The total cost for the 11 lakes is USS3.6 million. These lakes are presented in the table below.

In other respects, an opportunity has been identified near Tebnine to construct a water retainer at the downstream of the Ain-Mezrab water source, allowing the retainment of 1.8 million m<sup>2</sup> of water. This source, situated at 2 km from the village, provides an average debit of 100 liters per second. The project consists of creating a dam receiving the water of this source, as well as the water coming from the running of the bank basins of Tebnine, Sultanieh, and Safad El-Batikh. The project, estimated at USS900,000, land cost included, will allow the irrigation of 200 to 250 hectares at the downstream.

The realization of these 11 lakes and of the project of Ain-Mezrab could constitute a first phase of a bigger wide-ranging project in the region. They should be realized in the spirit

of experimentation, and a study should be carried out to identify other appropriate sites for this type of retaining.

The mechanization and modernization of exploitations

The modernization of exploitation methods is essential for increasing productivity and, therefore, improving the agricultural income level. Particular assistance should be provided to the farmers in this domain, dealing essentially with agricultural machinery and material.

It is suggested that this support be operated by two "cooperatives of common usage of agricultural materials" (CUAM), to be created in the cazas of Bint-Jbeil and Marjeyoun, the first one at Bir Es-Salassel and the second at Houla, in order to cover a large area of neighboring agricultural villages.

Each of these cooperatives could be equipped, as an indicative measure, with:

- 4 tractors with yoking
- 2 combine harvesters
- 2 "Poclains" with a charger
- 4 concrete mixers

T23. The establishment of mountainous lakes in South Lebanon: (cost of projects)

Localization				Estimated cost		Caza
		Surface to irrigate in hectare	Per hectare (USS)	Per m³ of water (USS)	Total cost (USS)	
North of Srobbine	80 000	21	9 600		216 000	Bint-Jbeil
North of Branchit	70 000	18.5	10 400		192 400	Bint-Jbeil
South of Braachit	105 000	28	8 700	1	243 600	Bint-Jbeil
Rchaf	160 000	42.5	7 750	Varies between	329 500	Bint-Jbeil
Aïn-Ebl	105 000	28	9 000	\$2 and \$2.5	252 000	Bint-Jbeil
Rmaich North	336 000	90	7 400		666 000	Bint-Jbeil
Chihine	140 000	37.5	8 000		300 000	Tyre
Blachiye	53 000	14	11 000		154 000	Туге
Debl	336 000	90	7 700	1	693 000	Bint-Jbeil
Rmaich South	224 000	60	8 000		134 400	Bint-Jbeil
Kounin	193 000	51.5	8 500		438 000	Bint-Jbeil
Total	1 802 000	481	7 524	] [	3 618 900	

Source: Localization, surface, capacity (see study prepared by Dar El-Handasah, Chaer 1972). Study financed by the Council of the South. The costs are actual prices.

It can also be foreseen that one of these two cooperatives be equipped with a crusher (crushing of stones to make labor easier). These centers should allow the assurance of the necessary agricultural services at the opportune moment to real cost of work. The perceived rent will cover the management and maintenance fees.

The total cost of an installed CUAM is US\$300,000 including the costs of land, construction, equipment, and the training of two employees per cooperative, hence US\$600,000 for the two projects.

Already, this type of help was experimented in 1998 in the village of Chakra (acquisition of a tractor by the cooperative) and in the port of Tyre (installation of a winch by the Syndicate of Fishermen in Tyre). These experiments have been perfectly concluded, but they were very localized. The above projects would constitute operations having a larger impact.

## Assistance for seeds and plantation

The diversity of agricultural products will permit to enlarge the perspective of flow of products and will better assure the farmers' income. Assistance for farmers in the introduction and refinement of seeds and seedlings have been a current activity of the Ministry of Agriculture and its affiliated research institute. This service has to be reactivated to introduce plant varieties that can be better marketed.

The question to be asked is less in terms of the introduction of new cultivation than in terms of diversity of production. It is the variety that allows farmers to face marketing risks, and not the types of particular cultivation.

Nevertheless, the introduction of new products for the region can be experimented, like aromatic plants, medicinal plants, certain varieties of flowers (field rose), semi-irrigated grapes, and silage (bersim) for breeding. Assistance in harvest and plantation should also provide nursery services the production of fruit trees and forested regions.



Greenhouse cultivation in Toura

Such assistance should have been provided through the channels of the Ministry of Agriculture, to be reactivated in each caza. The share of investment that the programme can grant to this operation will include assistance for the constitution of nurseries and the provision of equipment. The programme could grant a total amount of US\$100,000 for each of the five nurseries in the different caza, whereas the remainder of the needed budget could be provided as a contribution from the Ministry of Agriculture to the constitution of these nurseries.

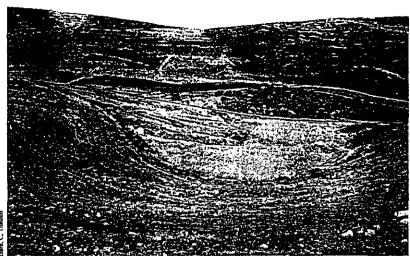
#### Technical assistance to animal breeders

It is necessary to reactivate assistance services, formerly given by the Ministry of Agriculture, to animal breeders. This includes the selection of breeds, orientation in veterinary and food material, and trading.

It is suggested, to create three experimenting breeding farms:

- Two centered on mixed breeding (ewe Awassi and goat Baladi, 200 to 300 heads of each), to be located in Rmaich (caza of Hasbava) and Chebaa (caza of Hasbava).
- The third centered on cattle breeding (100 milk cows Baladi), to be located in the plain of Khiam.

The orientation work provided by these farms can improve the breeding productivity, which can reach as high as 80%, and even 100% over production using the traditional techniques.



Cultivated areas in the valley of Sultanieh

The cost of investment of these projects is US\$300,000 for each of the farms, and US\$370,000 for cattle farms. Once settled, their operating budget will be covered through the sale of products.

These projects will be initiated for the account of the Ministry of Agriculture due to the lack of cooperative structures in the domain of breeding, especially extensive breeding.

To be noted is that an NGO (Mercy Corps International) financed by USAID (United States Agency for International Development) has initiated the operation, in this same spirit, of an experimental farm counting 5000 chicken, 10 cows, 8 calves, and sheep, using biogaz in the plain of Marjeyoun in 1998.

The progressive change from tobacco cultivation to irrigated cultivation

Tobacco cultivation has progressively lost its economical justification and has become a form of social support to certain groups of the rural population.

This change from an economical logic has been legitimated by the necessity of supporting poor population living under conflict in South Lebanon. The same type of operation was spread to certain population groups in the Bekaa who are deprived of resources because of the eradication of cannabis cultivation.

These solutions are exceptional, durable and very expensive regimens: tobacco is bought from the farmers at a price five to six times higher than the actual market price. This forms direct financial aid matched with the produced merchandise. The cost of this social support on the state budget is about US\$20 million per year, only for the studied region.

For agriculture, tobacco cultivation is not a joy. It mobilizes extensive efforts of entire families, including women and children, all along the year.

The execution of the irrigation project in South Lebanon from quota 800, or more modestly the projects of mountainous lakes, will offer the opportunity for shifting from tobacco exploitations. This shift is possible since the revenue obtained from one hectare of tobacco (as per the price of support by the government administration) is equivalent to the revenue that can be obtained from one hectare of irrigated agriculture for a lesser amount of work.

Hence, a system where these new irrigation possibilities are coupled with contracts of reconversion can be initiated. This puts an end to the licenses of tobacco cultivation, but will guarantee a pre-determined level of financial compensation for a limited duration (five years, per example), to be channeled from the funds of the tobacco administration.

The sum of the financial compensation given to farmers who will accept to enter in the system of re-conversion should allow them to secure a specified income level, especially during the first years during which they will have to face investments. This sum should even be enough in order to push the farmers into accepting the re-conversion from tobacco cultivation.

The suggested contract for re-conversion will concern the farmers possessing one hectare at most (which is the case for 90% of farmers).



It will include the following measures:

- 100% public financing of irrigation installations driving water to the limit of the parcel;
- 100% public financing of the investments of the first three years for the purchase of seeds, plantations, fertilizers, and plowed land, or the purchase of livestock, in the maximum limit of US\$10,000 per farmer;
- Pursuit of payment of the tobacco grant based on the last known yearly sum, during the three transition years (on average US\$7,000 per hectare);
- Re-purchasing of the cultivation license for US\$5,000 per hectare.

Also, the public costs of these measures will be:

- US\$30,000 million to drive water to the 7,000 concerned parcels;
- US\$70 million to cover the investments of re-conversion;
- US\$25 million of subventions for the transition;
- US\$35 million for the re-buying of licenses.

The total cost of this operation will therefore amount to US\$160 million, in other words the equivalent of less than eight years of current grants of the tobacco administration in the zone. If this programme is executed over 10 years, management of the farmers' regimen in current re-conversion, as well as those of the other farmers, can be done: every year 700 farmers will leave the old regimen to enter into the new now. This shift in cultivation will cost US\$160 million, as indicated previously, whereas the current regimen of the farmers will cost, during the same period of 10 years, about US\$105 million. In total, this will amount to US\$265 million over 10 years, slightly higher than the cost of the current actual regimen (always concentrated at the beginning of period). Coupled with the perspective of a total cessation of tobacco cultivation in limited terms, this option will represent a yearly saving of more than US\$20 million for the Lebanese State.

In parallel, one should study the forbidding of retrocession of tobacco cultivation licenses

now existing, in the occasion of the land fragmentation or of heritage.

The entrance into such a process will no doubt demand the adoption of statutory measures, even legislative ones, to modify the missions the operatory modes of the tobacco administration, as well as the cessation of funds granted to this administration.

The opening of new lands to cultivation and breeding

Assistance for the opening of lands to cultivation has been the traditional activity of the Green Plan. Hence, it will be convenient to re-establish this agency and to make it more efficient. This policy should be lead in the framework of the rehabilitation of the administrative management, examined in a later section of the study. The development programme could grant US\$200,000 per year to this type of action, which should essentially accompany the execution of irrigation projects in the region.

Orientation and training in agricultural techniques and irrigation

The engagement of ambitious programmes of training in production techniques, irrigation and marketing, and veterinary care is eventually not existing. It covers a strategic importance in the perspective of increasing productivity. Here too, this includes actions to be led in the framework of rehabilitated administrative management, examined in a later section.

The development programme will be able to grant US\$75,000 per year to this type of action, for short training sessions in small groups or for counseling missions conducted on sites. This assistance will be able to cover 40 short sessions and 200 days of land visits (benefiting 400 farmers) each year.

Assistance and counseling in the subject of fertilizers and herbicide materials

In order to lessen the cost of agricultural inputs for small farmers and to preserve the environment, it is necessary to lead an assistance policy in the subject of fertilizer and herbicide



Winch for raising up of small boats set on the quay of Tyre port in the framework of the joint programme of the UNDP and the HRC in 1998

use. In support to the Ministry of Agriculture, the development programme could contribute to the emergence of cooperative centers having:

- A veterinary pharmacy;
- A stock of fertilizers and herbicides;
- Sprayers and fertilizer spreaders.

The unit cost of this type of project is USS30,000. The development programme could contribute around USS25.000 with the aim of creating three centers of this type each year, to reach 15 centers.

Regroupings

Improved productivity can also be looked for by the operations of established regroupings, leading to the regroupment of scattered land. Such regroupings could be foreseen within the framework of envisaged irrigation projects in order to rationalize investment in the secondary networks.

Such regroupings should include groups of at least 50 hectares, and should accompany the execution of plans in small irrigated surfaces. A cooperative association, with the membership of irrigators in every region, should lead the regrouping and equipping of parcels. The development programme could support this

A few ideas of food industry projects which can be encouraged

- A processing unit of transformation for packing, conservation and trading of olive and salad oils in Hasbaya, at a cost of US\$200,000;
- A similar unit at Deir-Mimas;
- A processing factory for tomato paste in Ras El-Ain at a cost of US\$250,000;
- A similar factory on the plain of Marjeyoun;
- A processing factory for citrus fruit in Qasmieh;
- A processing factory for apple juice in Jezzine;
- A dairy factory at Rmeich;
- Another cheese and dairy form in Chebaa;
- A treatment unit for poultry in the region of Tyre;
- A processing unit of canning jam and honey.

activity by providing part of the fees, for example US\$100 per hectare, for a total of 100 hectares on average per year.

The development of small food industries

It is convenient to favor the development of small and medium industries for conditioning and processing agricultural produce, treatment of dairy products, stamping, and foraging for breeding. These activities will contribute to the development of production, employment and increased respect of norms and veterinary hygiene.

In cases where such projects are initiated by agricultural cooperatives, the development programme will be able to assist in providing a part of the investment costs. In case the private sector is interested, the development

programme could assume a bonus of interest rates on contracted loans (reduction of seven points) over the first three years. This measure has been attached to the present circumstances of high interest rates of bank loans.

In one case, as in the other, the part assumed by the development programme will be of US\$75,000 per project, on average, with the objective of reaching one project per year.

The modernization of marketing channels
Economic development of the region faces
many constraints, especially in the domains
of merchandize logistics and marketing channels: number of intermediaries, monopoly in
certain branches, lack of competition, lack of
reliability in trading, lack of respect of certain
regulations, absence of performing channels
in export, etc.

These gaps should be addressed as they have a particularly negative impact, both on producers and consumers. They also lead to a halt in the potential for export, especially agricultural produce.

The modernization and structuring of marketing channels is a major pre-requisite for the success of agricultural development. This concerns the local markets as well as the functioning of principal markets in big cities, including those of Beirut, the storage of products, and the channels of exportation.

The development programme should favor the construction of markets, and should support innovation projects of marketing channels that would help the farmers to expose their products in national fairs or even international exhibitions.

It should especially support steps, with the logic of branches to be organized over a certain product, and centered on the marketing of this product.

This assistance should go to cooperative structures or to municipalities and should concern projects aiming at improving market-

ing conditions, opening up of competition, and the reduction of market monopoly. The programme could contribute 30% of the cost of such initiatives, in the limit of a ceiling of US\$20,000 per project, with a maximum of five supported projects every year.

The promotion of norms and labels

The imposition of measuring norms and veterinary ones, as well as the repression of cheating concerning these norms, will be prerequisite for allowing the establishment of credibility of the region's farmer.

Within this context, the South can play, more than other regions, the card of quality control, taking into consideration the image of natural preservation of which it already profits.

The creation of quality labels, marks, and controlled names will permit to favor the quality of products and to justify the relatively high prices.

The development programme could grant a yearly amount of USS50,000 to this policy, which can take variant forms.

The actions of reforestation

The actions of reforestation contribute to the

Impact of suggested actions on the priority objectives

	Poverty	Civil society	Conditions for women	1	Private initiative	Global impact
Food industries	***	××	××	! · .	***	A
Re-conversion of tobacco	***	×	×××		***	A
Local projects of irrigation	***	. ×	**	×	**	В
Cooperatives of materials	**	***	×	* .	**	В
New lands	***	•	•	**	***	8
Orientation and counseling	**	××	× ×	×××	*	В
Norms and labels	*	××	•	××÷	*×	В
Marketing	***	××	-	-	***	В
Seeds and plantations	***	×	•	*	**	(
Experimental farms of breeding	**	×	•	. ∗	**	(
Fertilizers and herbicides	***		•	××	**	(
Reforestation	¥	××	•	×××	×	(
Regrouping	**	**		×	××	(



Century-old olive trees in the region of Tyre

stabilization of land, the preservation of water resources, and the protection of natural animal life. They can constitute complementary income sources for the rural populations. They also contribute to the beautification of natural sites.

The development programme can support the Green Plan, in charge of this type of activity, to vitalize its intervention and accelerate the operations of reforestation. It can, in this way, contribute with US\$5,000 per reforested hectare, with the objective of a hundred hectares per year.

The whole of the activity militates in favor of the creation of a mechanism for agricultural development of South Lebanon made of:

- An experimental cell of an agricultural development project, established on the land, forming an integrated part of the team responsible of putting in action the whole of the socio-economic development programme of South Lebanon. This cell will act in close collaboration with the delegates appointed by the Ministry of Agriculture and the Ministry of Electrical and Hydraulic Resources to follow implementation of the the It will have grants to the programme. support the agricultural development in the framework of the actual development programme.

- Antennas of the Ministry of Agriculture in

every caza, which should relay to the programme. These antennas will be helped by the experimental cell, which will provide them with a support in material, training, products and experts. (See section on the administrative "rehabilitation of management"), and will assure the financing of the foreseen operations. The farmers will have these antennas as speakers since the launching of the programme, in co-definite conditions by the experimental cell and the Ministry. Each antenna should, at a term, provide services revealing the competence of the ministry itself, The Institute of Agronomic Research, and the Green Plan. The Litani Office will be able to use these structures as a base for the development of its irrigation projects. The Ministry of Agriculture has already started a project of this type at Khiam in the caza of Marjeyoun, where it has created a school of agriculture.



## T24. Synthesis table of the proposed assistance in the agricultural sector under the development programme

Line of Action	Indicative cost of the action : linitial investment (USS)	Indicative cost of the action : Annual spending (USS)	Remarks
Irrigation, heavy projects	See infrastructure		USS400 million to finance
			on the acknowledgment of infrastructures over 12 to 15 years
Irrigation, light <b>projects</b>		840 000 per year	
Cooperative of agricultural material users (2)	600 000 over 3 to 5 years		
Nurseries, seeds, and plantations (5)	500 000 over 3 to 5 years		
Experimental breeding farms (3)	970 000 over 3 to 5 years		
Re-conversion of tobacco plantations		6 500 000 per year	This annual spending corresponds to the cost over 10 years of the progressive conversion of tobacco cultivation, to be led with the Tobacco Administration
Opening of new lands for cultivation		200 000 per year	
Orientation and counseling		75 000 per year	
Fertilizers and herbicides	75 000 over 3 to 5 years		
Regrouping		10 000 per year	
Food industries	600 000		
Marketing		100 000 per year	
Norms and labels		50 000 per year	
Reforestation		500 000 per year	

## C3. The rehabilitation of the environment, the sites, and the environment of life

The rehabilitation of the environment, the sites and the environment of life is an important pre-condition for the development of tourism, but also to attract staff and investors to the region. It is also key in the policy of global development of the South, with the importance of establishing the region's future image on the notion of authenticity, preserved nature, and remoteness from sources of nuisance and pollution.

This line of action passes through:

- physical work of rehabilitation and valorizing the sites;
- statutory measures concerning urbanism and the occupation of lands;
- specific measures for the preservation and management of water resources;
- mine clearance of the region, an essential condition for the security of inhabitants and visitors.

## C3.1. The works of preservation and valorizing of the sites

These works should concern the valorizing of the access to archeological and patrimonial sites, when needed, by a delegate management of a few members, including some experts in archeological fields of work.

The beaches south of Tyre. Their preservation represents a major economic and environmental challenge



The valorizing of the access sites

The 50 sites of South Lebanon are mostly totally abandoned because of the conflict. Some of the towns and villages have recently (June 1998) been granted elected municipal councils which can play a major role in the valorizing of these sites. In some localities, local associations also have activities in conservation.

It is necessary to support these local associations and encourage them to start the work of cleaning up the sites and improving access, putting up sign posts, and providing information to visitors. These initiatives can concern natural, historical, or patrimonial sites. (A traditional fishing port can be considered a touristic center of interest.)

The development programme can support these initiatives through co-financing, for example 70% of the municipal or ministerial work on the base of identified projects with known quality.

In this context, it can be expected to realize five projects of this type per year with an average grant per project of US\$150,000, that is a total of US \$750,000 per year.

The delegate management of the sites

Some historical sites (archeological remains of Crusaders or Arabs) or natural sites (caves, water springs, etc) are not the subject of any periodical follow-up of administrative agencies. Their preservation and touristic promotion can be assured by assigning the management to local associations established in concerned localities.

This delegation of management is undertaken after an attentive selection of the delegate, and on the bases of precise responsibilities indicating the duration of the delegation, the obligations of both parties, and the modalities of execution and public tariffs. It is not accompanied with a grant to the delegate.

The development programme could assist in this type of arrangement, helping its achieve-



ment with competitive administrations, and bringing a part of the financing for the initial works of reshaping the sites.

An average amount of US\$50,000 could be granted to each project of delegation management, to finance part of the works for reshaping and management equipping, with a reasonable objective of two operations per year.

## The archeological sites

One of the essential conditions of site preservation is to make the young generation aware of the importance of history. The introduction of archeological sights targeting the young people from South Lebanon, as well as those from other geographical regions, will be the best means to achieve awareness-raising, along with updating other patrimonial wealth and potential sources of tourist income. The priority should be sites that are most threatened and new findings.

The development programme could encourage this type of initiative by covering 80% of the cost, or US \$800,000 per site, with on average one new operation per year.

## C3.2. Regulatory measures

The statutory power of the state is an essential element for the orientation of urban development and for the preservation of resources necessary to the development of tourism and to ecological equilibrium. A series of statutory texts should be taken in order to realize the following objectives:

- The city of Tyre, the agglomeration of Nabatiyeh and four other major places of the caza, the agglomeration of Tebnine, and other important localities should be the object of the local direction plans organizing construction rights. These plans are essential to urban quality, the protection of agricultural lands and natural spaces, and for the rationalization of infrastructures. The



Roman vestige in Hebbarieh

General Directorate of Urbanism has engaged its works, which should be completed and followed up.

- The archeological remnants and the major tourist sites should be the object of very strict restrictions and valorizing plans. This demands, in the first place, the supervising of a work of full inventory of all these sites, and the elaboration of a regional schema of touristic development, in coherence with "The Touristic Development Plan of Lebanon 1995" (Ministry of Tourism).
- The coast south of Tyre, as well as natural sites of remarkable character, should be the object of very strict statutory restrictions guaranteeing that this resource will not be wasted by an anarchic urbanization of this zone. A minimal distance should be respected between the coast and the tourist facilities and the main hotel facilities should be located in Tyre. Currently, the Ministry of Environment has designated a stretch of 5km of the beaches south of Tyre as a protected

area. An extension towards Naqoura and Sarafand should be considered.

- The sector surrounding Lake Litani, the valley and the region of Mount Hermon require regulations for tourist facilities and leisure activities as well as laws protecting the landscape (quarries or dumping).
- The banks of the Litani, the Hasbani, and the Wazzani, the sector of Ras El-Ain, as well as the valleys should be protected from urbanization and pollution in order to preserve of streams and water sheets and to maintain natural areas.
- The valley of Bisri north of Jezzine demands particular protection measures including the valleys, woods, and forests of the region.
- The old centers (Tyre, Marjeyoun, Jezzine, Kfarhouna, Hasbaya, etc) should be the object of particular plans of preservation and valorizing the heritage.

One can envisage the launching of two operations of statutory preservation on average per year, either on the acknowledgment of the schemas of urbanism, or on the acknowledgment of the preservation of natural sites. The development programme will support the elaboration of these rules, and will help in mobilizing a co-financing of 20% to each ini-

tiative, in the limit of a ceiling grant of US\$20,000, destined to cover part of the cost by providing recourse to high level technicians in concerned administrations.

## C3.3. The preservation and sustainable management of water resources

The protection of water resources, as much on the quantitative plane as on the qualitative, is guided by a global approach founded on the notions of ecosystem and bank basins.

The quantitative management aims at assuring water in sufficient quantities to users without ruining the fundamental ecological equilibrium, in particular what concerns aquifers, and in controlling the economical usage of water.

The improvement of the water quality should aspire to reaching levels of international standards in permitted rates of pathogenic materials and pollutants.

Nine objectives should be kept in mind in order to be able to reach effective management of the quantity and the quality of water resources.

- 1. The placement of an appropriate and effective institutional framework for the planning and management of the water resources: this work should be coordinated between local water authorities and other public entities. The authorities in charge of water should have at their disposal relevant studies on water resources and pollutants, including a permanent system of control and surveillance. They should define a strategy, put it into action, and be capable of evaluating it periodically.
- 2. The reinforcement of the surveillance mechanism of water resources alimentation and of rejected pollutants: This demands rehabilitation works of precipitation measuring networks and meteorological surveillance, an inventory on wells, a study of sites emitting

Rubbish in the Hasbani



pollutants, a surveillance of the levels of aquifers, the identification of major points of recharge of these aquifers, etc.

- 3. The improvement of the legal and statutory mechanisms relative to the quality of water, be it on norms regarding the admitted rate of pollutants or the repression of misuse.
- 4. The distribution of quality drinking water, in sufficient quantity, to the inhabitants of South Lebanon, by determining the quotashares of agriculture, industry, and of domestic usage. This infers the rehabilitation of the distribution networks, planning supplementary quantities of water, and modernization of storage and pumping equipment.
- 5. The improvement of surface water which is a strategic option to fight the scarcity during the summer period. This needs construction such as mountainous lakes and the realization of the Khardali Dam. Generally speaking, water in reservoirs is likely to be used for irrigation and electricity production, domestic needs can be satisfied by using ground water as long as these sheets and sources are well protected.
- 6. The usage of underground resources respecting the sustainability of the development concept: The project of Wadi Jilou is a good example of what can be done in this regard (12,500m³ to 15,000m³ extracted per day).
- 7. The development and management of irrigation projects, which should imperatively be accompanied by training of farmers in irrigation techniques, as well as regrouping operations, wherever this is possible and necessary.
- 8. The planning and execution of a targeted plan of purification, essential to preserve the quality of water on the surface as in sheets.
- 9. The promotion of new individual and collective attitudes towards water resources.

These different points act as concrete suggestions in the framework of the development

programme, to the particular chapters on infrastructure development, the modernization of agriculture and the rehabilitation of administrative management. They are reminded here in order to give a global coherence to what should be done in this domain.

## C3.4. Mine clearance

The question of mine clearance is very important in the perspective of the development of South Lebanon. The risk of mined zones concerns essentially the demarcation line between the occupied and non-occupied zones, along the full length, representing more than 170km, with a width variant between 500 meters and 2km. The risk area hence includes about 200km² and corresponds to valleys and steep slopes.

The lessons taken from foreign experiences show that the average cost of identification and neutralization of a mine not indexed on a plan can reach as high as US\$500, which gives a first idea of the total cost included in such an operation. If we reserve, for example, the hypothesis of 20,000 mines (100 per km²), the total cost of the operation will be US\$10 million, but the situation may turn out to be worse or less alarming.

It will be convenient that the Lebanese government foresees, within the budget for defense, the necessary provisions for the launching of mine clearance operations very shortly after the end of the conflict.

Impact of the suggested actions on the priority objectives

	Poverty	Civil Society	Condition   Env for Women	vironment	Private Initiative	Global Impaci
Mine clearance & prevention	**	*		***	***	A
Preservation of water	***	*	**	***	*	A
Management of sites	*	**	**	**	**	A
Access to sites	*	*	•	**	***	В
Statutes of decrees	•	*	•	***	*	(
Archeological sites of work	•	***	•	**	<del></del>	(

The development programme should contribute to this site of work by information and growing awareness operations about the danger of mines, especially to children and farmers.

The operations of growing awareness of this type should be mounted with the support of NGOs present in the South. It is suggested

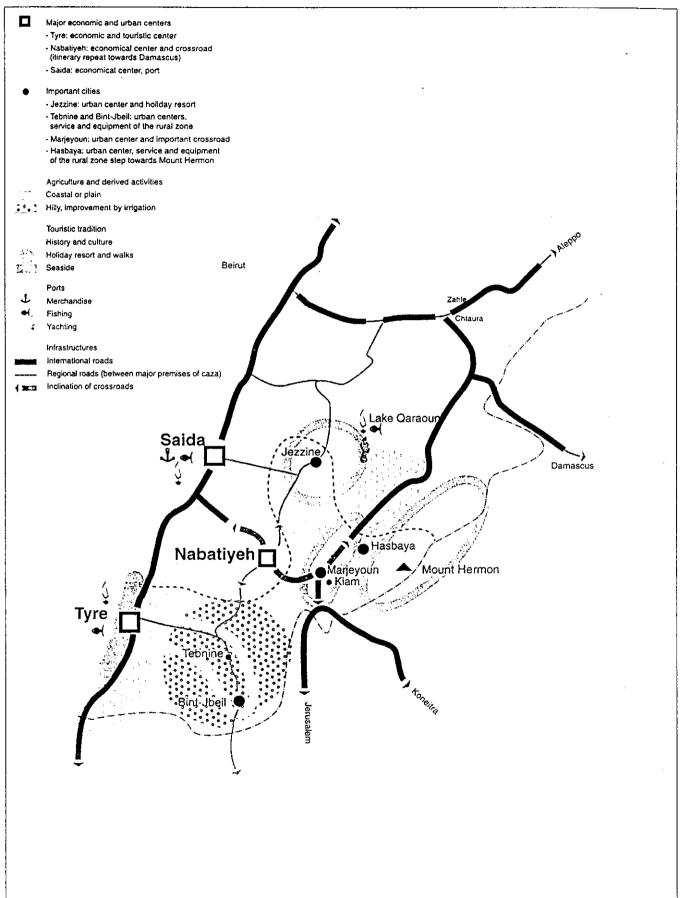
to budget an amount of US\$50,000 per year for each of the five years following the ending of the conflict for this activity.

T25. Synthesis of suggested assistance for the rehabilitation of the environment, the sites, and the environment of life from the development programme

Line of Action	Indicative cost of the action : Initial (USS)	Indicative cost of the action : Annual spending (USS)	Remarks
Valorizing the access of patrimonial sites		750 000 / year	
Delegate management of touristic sites		100 000 / year	
Archeological sites		80 000 / year	
Statutes and decrees		40 000 / year	
Preservation of water resources		See rehabilitation of administrative management	See Rehabilitation of the administrative management
Mine clearance	10 000 000 to 15 000 000 (estimation)		The action of mine clearance relief of the Ministry of National Defense
Prevention against mines		50 000/year	ŕ



## F15 Principals of development and valorizing the resources



## C4. Physical reconstruction and infrastructure development

Physical reconstruction and the development of infrastructure cover a strategic importance for economic development (communications, energy, irrigation), social development (habitat, health, education, drinking water, social co-education), and the preservation of the environment (sanitation, treatment of solid waste).

Efforts to be exerted in this domain are important. These concern a multitude of domains: construction and equipment for teaching and health establishments, construction of different public buildings, construction of houses, works on the road network and transportation, sanitation, electricity, telephone, solid waste, supply of drinking water and water for irrigation.

## C4.1. Construction and equipment of educational institutions

Efforts to be exerted in this domain contain an important dimension of reconstruction: more than 20,000m<sup>2</sup> of existing premises should be rehabilitated (18% of the actual space) and 3,600-9,000m<sup>2</sup> of new premises should be constructed on average per year of public schools that constitute 60% of the total education sector in concerned cazas under study.

In fact, for an average growth of the population amounting to 1.5% to 2%, which is the case now, the number of children who should attend school will increase by 1,200 every year. If the public education sector wants to maintain its part in the education sector

(60%), public schools should accept 720 supplementary students each year, which corresponds to a construction effort of 3,600m² per year (for 5m² per student)

After the withdrawal, the need for schooling will evidently be higher because it will have to take into account the flow of the displaced/returnees. During the first five years which will follow the withdrawal, children at school age (31% of the resident population and, by hypothesis, 15% of the displaced population who will return to the South) will probably increase at a rate of 3,400 on average per year for the first five years, followed by a yearly increase of 2,100 for the following years (see the section on demographic projection).

Taking into account an average enrollment rate of 0.85% to 0.90% of those of school age, this demographic growth will demand the creation of about 3,000 new places per year during the first five years following the withdrawal, and 1,800 new places per year during the following years.

If the public sector wants to maintain its share of the education sector (60%), it should therefore receive 1,800 supplementary students during the first five years, followed by 1,260 students per year during the following years. This corresponds to an increased need for premises equal to 9,000m<sup>2</sup> per year during the first five years and to 7,700m<sup>2</sup> per year during the following years.

Added to this effort of construction, an increase in the requirements for government-run technical and vocational institutes evaluated at 10,000m<sup>2</sup> should be also envisaged.

C4.1.1. Rehabilitation of existing schools
As previously indicated, (see Section A: The report), the census done by the CERD in 1996 showed that 18% of the existing teaching places needed important rehabilitation. Concerning the five cazas under study, this represents around 20,000m³ space that needs rehabilitation for the public sector only, at a cost of US\$3 million (US\$150 per m²).

This rehabilitation will tackle at least half of the establishments which are presently closed, allowing them to receive part of the growth in the population, amounting to around 1,500 students.

Construction of a school in Khiam by the Council of Development and Reconstruction (CDR) Dec. 1998





## C4.1.2. Construction of new schools

It will be necessary to complete the effort of rehabilitation by constructing new premises reasonably estimated, for the coming years, at about 3,600m<sup>2</sup> per year, or three to four schools of medium size (1,000m<sup>2</sup>) to be delivered each year. The cost of such a programme will be US\$1.1 million per year (USS300 per m<sup>2</sup>).

After the withdrawal, the rate of construction should be accelerated with an objective of delivering 9,000m² per year during the first five years, or the equivalent of nine to 10 schools of medium size per year. Hence the cost of this accelerated programme will be equivalent to US\$2.7 million per year (US \$300 per m²).

It was not possible, in the framework of the present study, to determine the localization of all these educational facilities. This is yet still to be done. It was always necessary to give precise indications for the locality of the first school to be constructed in the zone occupied at present. These indications concern the first 16 establishments to be constructed in that zone, for a school population of 2,300 to 2,500 supplementary students, or an offer allowing to cover the needs of public teaching in that zone for the three to four coming years.

These schools, (eight elementary, six intermediate, and two secondary) will be allocated as follows:

Two new schools are suggested for the caza of Bint-Ibeil:

- a primary school at Hanine, a village totally destroyed and deserted, with a school that needs complete reconstruction;
- a secondary school for the group of villages of Konnine, Tayre and Beit-Yahoun.

Five new schools are suggested for the caza of Marjeyoun:

- a primary school for the villages of Aadchite, Alamane, and Ksair;
- an intermediate school for the villages of

Deir-Seriane, Alamane, Aadchite, Ksair, and Kantara:

- an elementary school for the villages of Touline, Kabriha, and Souanet, which could also serve Bani-Hayyane and Talloussa when these two localities are no longer occupied;
- an intermediate school at Markaba, also serving the village of Rab-Tlatine;
- a secondary school at Taibe, serving Deir-Deriane, Alamane, Ksair, Aadaisse, Aadchite, Kantara, Kfarkila, and Deir Mimas.

Two new schools for the caza of Hasbaya:

- a primary school at Bourghos, also serving Sraire in the caza of Jezzine;
- a primary school for the group of localities situated south of Kfarchouba.

Four new schools for the caza of Jezzine:

- a primary school at Aichiye, also capable of serving the villages of Jarmak, Wardiye, Mahmoudiye, Dimashkiye, and el-Waziye;
- a primary school at Anane capable of serving the villages of Sfariye, Ktale, and Mazraat El-Mathane:
- a primary school at Kaytoule, capable of also serving the villages of Tayyoune, Homsiye, Kabaa, and Mrah Bou Chdid;
- a secondary school at Rihane serving the south of the caza.

Finally, three new schools are suggested for the caza of Tyre:

- a primary school serving the villages of El-Boustan, Dheira, Chamaa, and Marwaniye;
- an intermediate school serving the villages of Chamaa, Chihine, and Jebbine;
- an intermediate school serving Marwhine, Zalloutiye, Dheira, and El-Bustan.

## C4.1.3. Equipment of

## school premises

Existing schools, like the new schools to be constructed, require equipment in terms of furniture and educational material.

These equipment needs should be established with precision. However, it can be expected that:

- the vast majority of existing schools have a

lack of equipped laboratories for natural sciences in primary classes and for physics and chemistry in secondary classes;

- they are also not equipped with computers;
- a large part of the school furniture needs to be renewed.

For new schools to be constructed, the cost of furniture and educational material amounts to US\$200,000 per school (two-thirds for furniture, and one-third for material), or a total of US\$720,000 per year during the present phase and US\$1.8 million per year during the first years following the withdrawal.

Hoping that this cost could be reduced to half for existing schools, the total will amount to US\$100,000 per school (50% for furniture, and 50% for material) or US\$17.1 million for the 171 public schools of the region.

## C4.1.4. Construction of technical schools

The previous analysis highlighted the weakness of technical education in the five considered cazas, with respect to their relative weight on the national level, but also with respect to the economic need of this region, which will essentially apply to specialized technicians, in different sectors.

Also, it seems that training of technicians should develop in economic sectors expected to evolve. Hence, an increase in the demand for the branches PTB, mechanics, electronics, and management can be foreseen, in addition to new specialization in technical professions related to agriculture and tourism.

This increase will demand, no doubt, extensions of existing technical schools, the majority of which are private, and even a need for the creation of new schools.

It is suggested that the following be expected:

- Doubling, in 10 years, of the number of students in technical branches, i.e. 5,000 students instead of 2,500 at present;
- The share of the public sector in this growth should at least maintain its relative weight, representing at present one third of the technical education sector (800 students).

This will entail the creation of 800 new places in the public sector;

- This public effort will involve the construction of at least about 10,000m; of premises, either in extension of existing establishments or in new constructions, which should represent an effort of investment for construction and equipping of nearly US\$6 million;
- From other perspectives, it will be necessary to expect the renewal and modernization of machines and tools in existing establishments, representing an investment of about US\$3 million over a period of about 10 years.

## C.4.2. Construction and equipment of health establishments

As previously indicated, the public health sector does not demand construction of new premises, but rather measures directed towards equipment, training, and organization.

The Lebanese State had already launched, in 1996, an important programme financed by the World Bank and financial investors of the Gulf countries for the construction and rehabilitation of 11 public health establishments, of which 40% are located in the five cazas studied here.

These funds have already been partially earmarked for hospitals of Nabatiyeh and of Hasbaya.

The problem faced at present is not about the number of hospitals or beds, but rather about the equipment of the existing hospitals. The shortage pointed out by the medical teams concerns equipment such as:

- Scanners, MRI, Doppler;
- Ultra-sounds material;
- Equipment in operating theaters;
- Incubators;
- Analysis laboratories;
- Eye surgery;
- Wards for treating seriously burned patients.

Other organizational problems have also been raised which should have been settled in the framework of the national hospital policy.

These include, for example the low level of remuneration for doctors, the management mode of hospital centers, the training of health technicians, or the demand to increase the number of para-medical professionals.

The development programme of South Lebanon can, nevertheless, bring a contribution to the realization of these actions, by assistance to the training of the para-medical personnel which is a need felt in both the public and private sector.

The private sector should therefore target as a priority the equipping of public hospitals. A yearly line of credit of US\$500,000 can be forecasted for this subject.

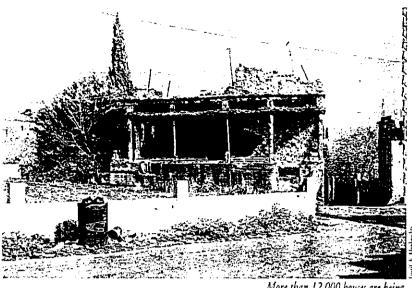
At the level of free health centers (about 60 centers in the five cazas), which, due to their geographical coverage, play an essential role of relay care system, the principal needs appear to be at the level of ambulance equipment. At present, only one or two free health centers have such equipment at their disposal. An objective can be assured to provide five supplementary ambulances for the region, one per caza, for assistance to health centers, whether public or under the authority of NGOs, which will represent a total cost of US\$250,000.

## C4.3. Construction of various public buildings

The socio-economic development of South Lebanon passes through the re-establishment of public services on the level of the entire region, where a lot of administrative buildings have been damaged during the conflict and will demand rehabilitation.

Also, a line of specific actions should be retained for these rehabilitation efforts which can concern the following:

- The Palace of Justice;
- governmental seraglios in the cazas;
- police stations;
- barracks



More than 12,000 houses are being reconstructed or rehabilitated in South Lebanon

- offices of variant administrations, excluding the educational and health sectors;
- fire stations.

The damages in this public heritage have not been estimated. It is probable to estimate the size at nearly 20,000m<sup>2</sup> of floors per caza, representing rehabilitation and equipment cost of about US\$30 million.

#### C4.4. Construction of houses

The inhabitants of the South have always rebuilt, when they could, their buildings immediately after their destruction. All the same, a large number of places and infrastructure demand more or less heavy works, and new destruction may take place.

Certain localities situated in the non-occupied zone along the demarcation line have all their districts destroyed or deserted. Other localities, located in the occupied zone, are partially or totally destroyed.

As has been previously indicated, in 1996 the five cazas had more than 12,000 damaged houses, of which 2,300 cannot be inhabited. If these are added to the damaged housing units in the cazas of Nabatiyeh and West Bekaa, these numbers would increase to nearly 15,000 and 3,500, respectively.

In the framework of the assistance to the return of the displaced, the Lebanese State should carry a share of the cost of these operations, according to the rules followed by the Council for the South, competent in this geographical region. The State would provide assistance to the reconstruction of destroyed houses with a ceiling of US\$20,000 per housing unit. The State gives assistance for the rehabilitation of damaged houses equivalent to the sum of the work, with a ceiling of US\$13,000 per house.

The public effort corresponding to this destroyed and damaged housing stock represents a considerable sum amounting to more than USS100 million. This effort is not yet totally realized, the Council for the South having already given a large share of this financial sum to beneficiaries in the form of allowances, even when this was not followed by the rehabilitation or reconstruction of corresponding houses.

However, this pre-payment raises today a serious problem, with the poorest families having probably spent their allowance on other expenses and have no more funds to reconstruct or rehabilitate their houses.

It is therefore probable that the Lebanese State be driven, after the conflict, to settle a group of difficult situations, probably by bringing new more modest assistance, preferably in kind (material, work, etc) than in cash, to the poorest households having to rebuild their houses.

It is hoped that this new contribution will cover the five years following the Israeli withdrawal, reasonably demanding a budget of US\$2 million per year, including allowances not yet given and complementary work to be executed for the most deprived families. It deals here with a hypothesis of work, which demands a deeper examination of the damages in order to determine the exact budget needed. For the rest, the expected demographic growth in the region should represent a growth of required housing space of 1,700 units per year, which will be financed according to the traditional rules of the private sector.

#### C4.5. Road network

The development of South Lebanon will demand, especially after the Israeli withdrawal, the rehabilitation of the whole road network. However, many projects can be undertaken at present.

The stress should be put, more particularly, on certain important liaisons from the economical and social point of view, as follows:

#### International axes

- Thee coastal center line north-south: the highway is currently being executed between Saida and Tyre, which should permit to assure an efficient highway liaison between South Lebanon and the capital, the international airport, and the axis Beirut-Damascus. The intersection leading to Tyre should be at a proximity from the secondary axis Tyre-Jouaya-Bint Jbeil. The work on the section Zahrani-Bablieh (8km), with a cost of US\$31.3 million, is in progress. The works between Bablieh and Tyre (24km) are programmed to take off in mid-1999. The total cost of this section is estimated at US\$210 million, of which one third is for expropriations. Its realization will take many years, thus it is suggested to concentrate a yearly spending of US\$10 million in the actual phase, and US\$20 million per year after the Israeli withdrawal.

After this withdrawal, it will also be necessary to rehabilitate the remaining 26km of roads between Tyre and the frontier. This rehabilitation represents a cost of US\$2.5 million.

In the case of peace agreement in the region, this axis should be doubled by a highway between Tyre and Naqoura, with frontier posts, in particular a road transit station.

- The center line Zahrani-Nabatieh-Marjeyoun-Rachaya-Masnaa: this line is essential to the interior zones of South Lebanon to the rest of the country and to Damascus. It will demand, in the first place, a capacity assuring a homogeneous level of service along

its full length. For the east-west region, it is convenient that these lines, after the conflict, will bring this axis to two tracks, which will demand an investment estimated at US\$28 million for the liaison Nabatiyeh-Rachaya by Marjeyoun and Hasbaya. An equivalent investment sum is needed to rejoin the axis Beirut-Damascus.

In the case of a peace agreement, the north-south branch (Masnaa-Marjeyoun) will be extended towards the plain of Houle in the form of a highway. It will then be an international itinerary assuring a continuous liaison from Turkey to Egypt and Saudi Arabia and with conditions less congesting than that those on the coastal axis.

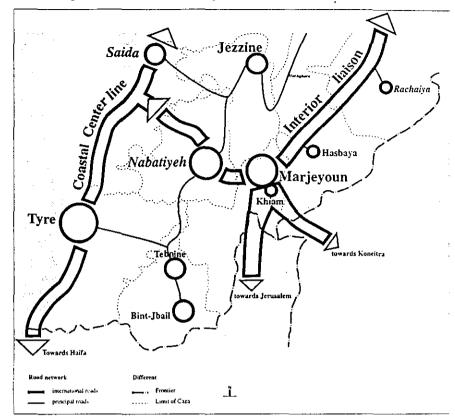
The branch east-west (Zahrani-Nabatiyeh-Marjeyoun) will be stretched towards Qonaitra, assuring an international itinerary linking Beirut, Mount Lebanon, and South Lebanon to the international network constituted by the route north-south Adana-Damascus-Amman-Aquaba, and by the routes east-west towards Iraq and the Gulf countries.

- The connection in the sector of Marjeyoun demands, consequently, very particular attention, this region being destined to become a crossroads of major importance.

#### Principal roads

- The road north-south Jezzine-Nabatieh-Ghandourieh-Chehabieh-Bint-Jbeil: this center line is essential to complete the north-south network of South Lebanon. It demands a connection leading to assure a continuity all along the itinerary. In the long term, this center line will be extended towards Safed in the South.
- The road west-east from Tyre to Bint-Jbeil through Jouaya and Tebnine: this itinerary rejoins the previous one between Tair-Zebna and Bint-Jbeil. To point out that the rehabilitation of this center line is currently registered in the national programme of road rehabilitation for a sum of US\$4.1 million financed by a grant from the World Bank. The work,

F16 Principal center lines to be developed



stretching over 28km, is executed by the Ministry of Public Works.

To these two priority itineraries, all other itineraries liaising between the major premises of cazas are added.

The principal roads linking the major axis demand, depending on their state, more or less heavy rehabilitation work.

The accounts carried out in the occasion of the present study have permitted to identify 210km roads in this category, linking theseven major localities of the cazas of the South, as well as the major localities in the caza of Rachaya. Less than 16km of this network is in poor condition, 170km is in good condition, whereas 24km is in an acceptable condition.

The total cost of the constructing the whole network (without Tyre-Tebnine already programmed) is around US\$20 million.

Secondary roads and other itineraries More than 308km of secondary roads have been identified in the five cazas, and their characteristics have partially been summarized' where conditions of security permitted.

Their rehabilitation demands a budget of US\$15-16 million.

#### Municipal roads

The situation of the municipal roads is critical in the majority of the localities of the region. An evaluation has led to estimate the sum of the necessary rehabilitation municipal works at about US\$45 million (US\$165 on average per permanent resident). This effort will be particularly heavy for the small municipalities and will no doubt demand assistance on a case by case basis, especially for the localities encompassing less than 1,000 inhabitants and for village crossings.

For this category of roads, it is suggested to allocate a lump sum of US\$5 million to the regional development programme, for supporting municipal works, especially at village crossings or in places serving as departure points for collective transport and also roads situated in small rural municipalities.

Rehabilitation of the Port of Tyre
It is necessary to launch the rehabilitation of the port of Tyre and its road accesses, consid-

ering its economic, touristic, and patrimonial interest. A budget of US\$10 million will allow the rehabilitation of the quays, the accesses, the buildings of the port and the fishermen's premises, and creating a pier for yachts. Considering the national stake related to this rehabilitation, it is suggested that the development programme resumes 50% of the responsibility of the works, the rest to become the responsibility of the municipality.

#### Road signs

Road signs are essential, not only for orientation and security, but also for touristic development which is a very important condition.

The project of tourist promotion relies on the concept of preserved environment, demanding that road signs be conceived in a homogeneous way on the whole region. This also concerns billboards, their form, color, and the languages used.

The global cost for equipping the network will be US\$2 million, of which US\$500,000 is for the cost of road signs on principal roads.

T26. Suggested projects in the road domain

Suggested operations	Estimated cost
Highway of the South between Zahrani and Tyre	More than US\$200 million is still needed
Rehabilitation coastal road between Tyre and Nagoura	US\$2.5 million after the withdrawal
Putting 2x2 tracks of the road Nabatiyeh Marjeyoun-Hasbaya-Rashaya	USS28 million after the withdrawal
Rehabilitation of principal roads between major localities in the caza	USS20 million + US24 million already financed
Rehabilitation of secondary roads (308 km)	USS16 million
Municipal roads (municipal works)	USS5 million over 45
Rehabilitation of the port of Tyre and its road accesses	US\$5 million over 10
Road signals	US\$2 million
TOTAL	About USS200 million over 8 to 10 years

C4.6. Improving sanitation

Improvement of sanitation is essential for the protection of water sheets, surface water, and the preservation of public health. Considering the delay of investment in this sector, pragmatic solutions should be undertaken with the following principals:

- Complete water treatment networks for the most important urban centers, containing purification stations allowing an outflow of purified water into the sea, rivers, or on fields to be irrigated. This type of project relates to important urban centers, in particular those of Tyre and Nabatiyeh (serving nearly 50,000 inhabitants), the networks to be conceived will at least serve 10 surrounding localities.

The CDR is currently engaged in this track for the networks of Tyre and Nabatiyeh.

- More modest water purifying networks, with a purification station for localities of 3000 to 5000 inhabitants. This includes 13 localities in all for the area of the programme, without the centers of Tyre and Nabatiyeh: two in the caza of Bint-Jbeil (center of Tebnine and Bint-Jbeil), six in the caza of Marjeyoun (center of Marjeyoun and Kleyaa, Khiam, Kfarkila, Taibe, and Majel-Silm), one in the caza of Jezzine, (the city of Jezzine), one in the caza of Hasbaya (center of Hasbaya), two in the caza of Nabatieh on the border of the occupied zone (center of Jarjouh and of Kharsir), and one in the caza of Western Bekaa on the border with the occupied zone (Machghara).

Among these centers and localities, only three have at their disposal sewer networks (Hasbaya, Marjeyoun, and Jezzine). These networks are old and in poor condition, and one (Marjeyoun) is linked to a treatment station (with activated mud). An effort for these categories of localities and centers is still needed.

- Finally, individual or collective water treatment solutions by septic holes and spreading can be foreseen in all the other localities (more than 150 localities), at least if they do not encompass a very high threshold of population, provided that the nature of the sites allows such solutions (permeability of land, disposition of villages, etc.)

To be noted in this category is the existence of a few collective networks partially serving some localities, such Chebaa (caza of Hasbaya) and four localities of the caza of Jezzine (Bteddine-Lonkoch, El-Harf, Baitoura, Qairoule).

For the agglomerations in Tyre, the CDR has already committed financing of USS25 million (22 million BEI and 3 million BIRD) permitting the execution of sewer networks, in addition to the creation of a treatment station in the north of the city and a drainage channel from the station to the sea. The procedures of adjudication were following the normal course at the end of 1998.

For the agglomerations in Nabatiyeh, rehabilitation works amounting to US\$1.5 million have been secured and are in course of ending, but the CDR has programmed the creation of a treatment station with a budget of US\$16 million to be financed through the French-Lebanese Protocol.

One should hope, for Tyre as for Nabatiyeh, that these works are realized in the coming four to five years. They should respond to the needs of these agglomerations at least till the year 2010.

The 15 necessary networks in the localities and agglomerations of 3,000 to 15,000 inhabitants should be programmed. They can represent a total cost, on average, of US\$3 million per locality, or about US\$39 million for this category of cities and secondary agglomerations. The priority localities are the most populated, including the agglomeration of Tebnine (between Jmeijme and Yater) and Bint-Jbeil, followed by Hasbaya (rehabilita-

tion), Khiam, Jezzine, and Machaghara. These works should be undertaken in less than 10 years, which will demand a yearly investment of about US\$4 million.

The treament of water by deconcentration solutions in the localities of more reduced size demands actions of promotion and support to the treatment techniques in holes. This concerns nearly 150 localities (villages and hamlets) in the surface of the development programme. The average cost per village, is around US\$150,000 for collective solutions (sewer network and spreading), and less than US\$10,000 for the completion of individual solutions. The total cost for the public communities is therefore relatively modest, amounting to US\$6 million for the whole of this category.

Like this, in total, more than USS80 million will be necessary to settle the most critical solutions. The urgency of these works for public health and the environment, especially for the big agglomerations, demands the programming of a major part of these investments during the five coming years, even in the case of the persistence of conflict.

## C4.7. Electricity

According to the evaluations done by the Electricity of Lebanon (EDL), there is no problem of capacity, but rather a problem of network.

The necessary works should include:

#### In the short term:

- The realization of a line of 66kV over 15km between Nabatiyeh and Sultanieh (station of Tebnine) aimed to secure the feeding of the region served by the station of Tebnine, this line assuring the locking up of the network between Nabatiyeh, Sultanieh, and Tyre. In fact, the locking-up will happen through a liaison in Sultanieh-Marjeyoun permanently subject to the hazards of the conflict. This project of liaison Nabatiyeh-Sultanieh in 66kV is a priority in the present

phase. Its cost is evaluated at USS3 million.

- The rehabilitation of the line 66kV of 18km between Tyre and Sultanieh (station of Tebnine), built in the 1960s, and which is in poor condition. The cost of this rehabilitation is estimated at US\$2.5 million.
- The rehabilitation of the 15 to 20kV network essential for serving the localities of the region. Thirty-eight liaisons have been identified with a total sum of works of US\$2.2 million worth of work.

}

}

- Finally, there exists a big need for network equipping in transformers: 13 units of 400 V; 56 of 250kV, and 27 of 160kV. The total cost of this equipment has been evaluated at US\$615,000.

#### In the medium term:

- It will be necessary to complete the rehabilitation of the network of 15 to 20kV after the Israeli withdrawal for a budget of US\$2 million.
- It will also be necessary to rebuild a liaison 15kV between Tebnine and Bint-Jbeil, for a cost of USS400,000.
- Finally, the capacity of the sub-stations of Wadi Jilou, Tebnine, and Marjeyoun should be increased to respond to the expected growth in demand over the next 10 years, which will need a budget of US\$15 million.

In total, the necessary works on the electrical network, without responding to emergency situations, demand an investment of US\$8.2 million in the short term, and of US\$17.4 million in the medium term.

## C4.8. Telephone

The programme of the Ministry of Telecommunications currently being executed foresees the increase in the number of telephone lines in the region from 19,000 to 40,000. It is mentioned here as a reminder.

#### C4.9. Waste

The collection, treatment, and elimination of solid waste is the responsibility of the munici-

palities. These should face an important effort of equipment which, in most cases, deserves to become a collective effort for several communities in the framework of unions.

The cities of Tyre and Nabatiyeh should be granted appropriate waste treatment installations, which can service the surrounding agglomerations.

In other regards, the system of dumping should be promoted involving several municipalities. About 50 sites should be identified, set up, and managed for this purpose in the entire zone. The development programme could finance the preliminary studies and participate in financing 10 experimental setups throughout the region (two per caza), representing a total cost of US\$2 million (material, digging, enclosures, and training, excluding the cost of land).

Similarly, the development programme could support the effort of equipping the municipalities in collection and transportation material, with a financial contribution of 50%, representing a total sum of US\$2 million.

## C4.10 The supply of potable and irrigation water

It is necessary to assure a reliable feeding system for drinking water to serve the totality of the localities of South Lebanon. This infrastructure should be able to protect the water from bacterial contamination using chlorinating mechanisms for each feeding source. The rate of water loss should be reduced to an acceptable level, amounting to less than 30%.

Drinking water can be either drawn from rivers, water sources, or underground water sheets, with the principal of drawing water from the less polluted deposits at the least possible cost. Some mechanisms should be institutionalized to avoid situations where it is necessary to reduce the amount of potable water during drought or contamination.

The quantity of water needed to satisfy the

needs for domestic and economic usage for the coming 10 years is estimated at 25 million m³ whereas the amount of water needed for irrigation varies between 120-170 million m³ depending on the techniques of irrigation. Hence, the total yearly water needs amount to 145-205 million m³.

The projects of valorizing the hydraulic resources of the region, especially through the execution of the foreseen works on the course of the Litani and better exploitation of the Hasbani and the aquifers, can perfectly satisfy these needs.

These projects need heavy investment:

- Execution of the principal feeder, 56km from the quota 800 (Lake Qaraoun) towards the south, and the equipping of 15,000 hectares for irrigation (US\$342 million);
- Realization of the Khardali Dam (USS84 million);
- Equipping of 600 hectares for irrigation networks in the Khardali Dam (US\$50 million);
- Feeding of the regions of Awali, Saida, and Qasmieh with potable water from the basin of Anan and the tunnel of Joun (USS48 million).

The total value of the needed equipment is estimated at USS527 million. This will benefit (at least for three-quarters) the region as a whole, and the cazas of Marjeyoun, Bint-Jbeil, and Tyre. They will also improve the situation for the cazas of Nabatiyeh and Saida.

For the time being, temporary solutions should be found to increase the quantity of distributed water. These solutions may consist of new drillings for satisfying the needs in drinking water, and for reserving rainwater in the form of mountainous lakes.

Still, important work should be done on the water distribution infrastructure.

For water distributed through water offices, the rehabilitation of networks and equipment

represent a cost of more than USS62 million, of which US\$13 million would be earmarked for the office of Jabal Amel, US\$25.7 million for that of Tyre, and US\$23 million for the office of Nabaa Tasse (which includes the set Nabativeh-Zahrani).

These works include:

- Improvements of discharging conditions;
- Drillings in certain places;
- Improvements of installations of treatment (decanting, chlorinating, etc);
- Rehabilitation of water towers and reservoirs and the construction of new reservoirs;
- Rehabilitation of pumping stations;
- Reparation and replacement of some canal sections conducting water and distribution networks;
- Subsidiary works such as of access roads to stations, transformer rooms and administrative buildings.

The majority of these rehabilitation works are programmed by the government and have assured financing, including (source: CDR September 1998):

- Rehabilitation and extension of the network of Tyre water office: USS23 million financed by the Arab Development Fund (in current adjudication end of 1998);

Impact of suggested actions on the priority objectives

	Poverty	Civil Society	Conditions for Women	Environment	Privote Initiative	Global Impact
Drinking water, irrigation	***	*	**	***	××	A
Rehabilitation of schools	**	***	**	*	×	Ā
Building of schools	**	***	**		×	A
Equipping of schools	**	***	**		×	A
Roads	*	**		**	***	Å
Technical education	***	**	*	•	*	В
Housing	**	*	*	**	*	В
Purification of water	*		*	***	*	В
Electricity	*	-	*	*	***	В
Waste	-	**	*	***	-	В
Equipping of hospitals	**	*	**	•	•	C
Free health clinics	**	*	**			(
Public buildings	-	***	•	*	*	C
Telephone	-	**	•	•	***	(

- Rehabilitation and extension of the stations of Ras el-Ain and Bas (caza of Tyre): USS2.7 million, financed on the France-Lebanon Protocol (in current execution);
- Drillings at Marj el-Khawleh and construction of canals towards the station of Taybe (Office of Jabal Amel): US\$6.6 million, no financing, project in current preparation;
- Rehabilitation and extension of networks of the water office of Nabaa-Tasse (Zahrani-Nabatieh): US\$22 million, financing BDRD, in current adjudication end of 1998;
- Rehabilitation and modernization of different pumping stations in the regions of Saida, Tyre, and Nabatiyeh: US\$3.7 million with financing from the France-Lebanon Protocol, in current realization.

Finally, it is important to point out the demand to undertake the rehabilitation of canals and existing irrigation installations. For example, in the caza of Hasbaya alone, the rehabilitation of 38km of canals and the construction of nine reservoirs demand an investment of USS1 million.

T27. Synthesis table for suggested assistance for the reconstruction and development of the infrastructure and equipment

Line of Action	Indicative cost of the action: Indicative cost of the action faitial investment (USS)  Yearly spending (USS)		Remarks
School rehabilitation	3 million		
Construction of schools		1.1 million per year in present period 2.7 million after the withdrawal	·
Equipping of schools	17.1 million over 10 years for existing schools	720,000 per year in present period 1.8 million per year after the withdrawal	
Technical education	9 million		Provision
Equipment of hospitals		500,000 per year	,
Free health centers	250,000 over 5 years		Ambulances
Public buildings	30 million over 5 years		
Housing		2 million per year	Credit for the reconstruction effective after the withdrawa
Roads		24 to 25 million per year	Of which 20 million per year for the highway of Tyre
Purification of water	86 million		Of which 41 million already financed
Electricity	25.6 million		Of which 17.4 million after the withdrawal
Telephone	For the record		Land works
Waste	4 million		Co-financing of municipal works
Drinking water and irrigation	550 million		Of which 62 million for the network of offices (of which 51.4 million already financed) and 342 million for the Conveyor 800

## C5. The rehabilitation of human resources

An important effort will be required in the domains of training, economical integration and social accompaniment in order to allow the South to have access to the desired social development and to enable it to overcome its present social difficulties.

This effort should be deployed in three directions

- Professional training and economical integration;
- Illiteracy and educational support in the framework of general training;
- Taking care of the conflict victims.

## C5.1. Professional training and economic integration

Helping the youth (20 to 24 years old), having left school without specialized technical training, to acquire skills training by offering them short training in selected professions expected to be in demand by the labor market in South Lebanon.

This is a complementary measure with regard to training offered by the traditional educational system, destined to give a second chance to unqualified young persons.

The principal of the cost recovery in the cost of this activity will systematically be evaluated in order to assure the sustainability of these actions. In other regards, this will establish a mechanism for young job seekers to find adequate employment in enterprises.

## C5.1.1. Technical training

Technical training should target the sectors that have a good potential for job creation: sales professions, small industries, office work, services, BTP, tourism. They should be conducted either by specialized technical establishments or by the Chamber of Commerce, or by NGOs in the form of short sessions of 15 to 30 days for 15 trainees maximum, and presenting all the guarantees of efficiency and seriousness.

The development programme can support these training sessions through the provision of a grant of US\$20 per trainee per day of training. The objective should be fixed at reaching 500 young persons per year, over a medium duration of training of 10 years. This measure will represent a yearly cost of US\$200,000 per year.

# C5.1.2. Placement of the youth in enterprises The reconstruction efforts in the South will provide an important opportunity for job creation, on construction sites of canals and irrigation systems, water treatment plants, construction and rehabilitation of roads, rehabili-

ì

Į

gation systems, water treatment plants, construction and rehabilitation of roads, rehabilitation of the electrical network, municipal roads, public lighting, administrative buildings, etc.

In this important reconstruction boom in the South, it is essential that a share of the work be entrusted to the local enterprises of the South, and that the population of the South, especially the youth, profit from these job opportunities.

Thus, it will be essential to establish a mechanism for linking job seekers with job opportunities in the market. Within this context, it is suggested to create a resource center which has the following objectives:

- to provide a complete census the reconstruction and rehabilitation sites in the South launched by the State and the private sector;
- to update an index of job seekers and local enterprises;
- to systematically get closer to the employers to provide candidates from the local population based on the labor needs.

This resource center could be created in partnership with the Chamber of Commerce or with competent NGOs and with the help of the National Employment Office. Besides administrative secretarial work, the operational activity of the center should rest on the work of two or three persons charged with enterprise surveys. This activity will demand an initial capital of US\$80,000 per year.

This resources center is fundamental in the perspective of the present development programme. In fact, as is further exposed in this report, this center could also support the reintegration, not only of the youth, but also of the displaced returning to the South, freed prisoners, and of all other social categories who are deprived of resources after the end of the conflict.

# C.5.2. Literacy and the education support *C.5.2.1. Literacy sessions*

The high rate of illiteracy is a major handicap for the socio-economic development of South Lebanon. It is therefore suggested to offer adult literacy sessions, under the form of NGO support of those engaged in this type of activity. The grants given by the development programme will correspond to 300 hours sessions (for example evening classes over a period of five to six months), maintained at the level of 90%, in the limit of US\$5000 per session. Every session will receive a maximum of 10 persons.

By aiming to achieve an objective of 1,000 concerned persons each year, the cost of this measure will be of US\$45,000 per year.

## C.5.2.2. The education support

For the younger ones who have scholastic difficulties or difficult school attendance conditions, it is suggested to maintain short sessions of complementary education either in subjects of the education programme (including foreign languages), or micro-data processing. These sessions should take place during the school holiday periods, with a group of 15 children per session, for five to 20 days.

The support to the initiatives of this type will be done through the provision of 80% of the training cost, in the limit of US\$15 per child per day of training. By fixing an objective of reaching 1,000 children per year for an average duration of 10 days, the cost of this measure will be of US\$150,000 per year.

# C5.3. Taking charge of the conflict victims

This aims at supporting the social and economic re-integration of the displaced, the orphans, the handicapped, and freed prisoners.

#### C5.3.1. The re-integration of the displaced

The management of the return of the displaced is charged, at the national level, according to the known modalities, by the Ministry of the Displaced, the Fund for the Displaced, and the Council for the South.

In the South, this is the responsibility of the Council for the South which provides for payment of grants for the rehabilitation or the reconstruction of destroyed houses (see previous section).

Still, the return of the displaced depends on the possibility of ensuring sustainable economic integration.

Programmes centered on this issue have been tried out in other Lebanese regions with the co-initiative of the Ministry of the Displaced and the UNDP (Programme Aidoun), and NGOs such as Caritas, the Middle East Council of Churches, or the Pontifical Mission.

In the case of the South, the return of the displaced could represent, as was earlier mentioned, around 48,000 persons, or more than 15,000 active persons, which will demand a scale of treatment at the size of such a population flow.

Among these thousands of active persons, some will have a developed skill, but it is probable that the majority will search for one.

The only solution to assist this large group of returnees will be to seize the opportunity of launching large reconstruction projects, condensed over a period of three to five years based on the end of conflict, where the active persons can be integrated.

For example, irrigation works in South Lebanon could represent, at least, 10,000 jobs. It should be ensured that a large part of these jobs will go to the local population, giving priority to the old, jobless, and displaced.

This example shows the need for the resource center mentioned above, whose activity should allow to make employers aware of the necessity of integrating a social dimension in their work.

To this end, there should be an added effort of administrative and technical accompaniment of the displaced families wishing to return to their village of origin. This accompaniment, which should be taken in charge by NGOs, can take multiple forms, an activity for which it is suggested to earmark a capital of USS2 million for the five years following the ending of the conflict.

This support will come, in the context of traditional administrative assistance to the displaced, and will target the 2,000 families in the greatest need out of an expected total of 12,000 returning families.

#### C5.3.2. Orphans

It is also important to pay particular attention to the fate of the children whose parents were killed during the conflict, and who are deprived of economic resources allowing for their proper upbringing (feeding, continuing

their studies, acceptable conditions of housing, access to care services).

The Council for the South already foresees some expenditure on education and health care for under-aged orphaned children whose parents died because of the conflict.

The 16 orphanages in South Lebanon are primarily financed by private, local, and international donations, and by grants from the Ministry of Social Affairs. They all stem from private initiative, as is the case in the rest of the country. They only receive some orphans, the majority are being taken care of by their families.

}

It is especially to this second category that the development programme should apply. The programme could foresee partnership policies with the principal NGOs active in this domain, targeting children that are neither covered by existing orphanages nor by the Council for the South, especially in terms of professional training and economic integration when adolescent.

This action, which should be the subject of complementary studies, should represent a yearly cost of US\$200,000.

#### C5.3.3. Support to the handicapped

As is the case for the orphans, activities targeting the handicapped are led by private charitable foundations. These actions are also supported by the Council for the South which covers health care expenses including prosthesis and surgery. However, it is essentially the Lebanese Association for the Handicapped which has taken this question in charge:

Its center of Dhour-Sarafand assures medical care to the handicapped in all areas, accommodating more than 200 handicapped persons for long term care. Professional training is also offered.

The development programme should, in this context, center its intervention on the ampli-



A destroyed house in Khiam

fication of the integration efforts of handicapped persons in active life, through placing them in enterprises.

For this action, which deserves a more detailed study, it is suggested to earmark a yearly grant of USS200,000, aimed at projects executed in partnership with competent NGOs.

## C5.3.4. The re-integration

#### of freed prisoners

Persons freed from Israeli prisons and the SLA can face problems of social and professional re-integration. It is important to treat the situation of these persons in a global way, taking into consideration their household and psychological accompaniment.

Currently, many organizations are active on this subject. Also, the Council for the South pays a sum of US\$270 per month to every prisoner during his/her period of detention and during the year following his/her liberation, as well as a sum varying between US\$300 and US\$1,000 at the time of liberation to compensate for losses or irreversible handicaps suffered as a result of the detainment.

Moreover, the Council covers all hospital fees of prisoner medical care for former prisoners after liberation. According to the Council for the South, these cases amounted to 576 persons by the end of 1998. This programme has no doubt demanded about USS2 million per year during the last years. To these compensations, other assistance from political parties where the prisoners are members can be added.

Many NGOs try to contribute to the amelioration of the detention conditions or to the reintegration of freed prisoners, such as the International Red Cross, the Committee of Follow-up and Support to Prisoners, Amnesty International, Americans for Free Lebanon or the Multi-Initiative on Rights: Search, Assist, Defend (MIRSAD). Most of these NGOs essentially intervene in the domain of informa-

tion and the mobilization of public opinion on detainment.

Still, the weak point in all these aid systems continues to be the economical reintegration of freed prisoners. Complementary programmes centered on this question, covering the fees of training and investment to find a salaried job or to create one's own enterprise, should therefore be conceived and put in action by intermediary NGOs.

A budget of USS5,000 per person should be expected to this fact, covering all economic measures to be taken.

It is not, therefore, possible to determine the size of the yearly flows during the present phase of the conflict. Facing this incertitude, it is suggested to start from a reserve of US\$250,000 per year during the years of continued conflict. To this should be added the re-integration of prisoners who were previously freed and who have not yet succeeded in reintegration. By being limited to the persons freed for less than 10 years, this should represent about 600 cases, or US\$3 million, to register starting from the first year of the launching of these re-integration programmes.

After the end of the conflict, which will be marked by the liberation of all prisoners, an amount of USS2 million, to be spent at one time, should be earmarked.

This budget will come over and above the dispositions by the Council for the South, and will increase the public budget paid in favor of the prisoners to US\$5 million at the beginning of the present programme, US\$2.25 million in the current year, and US\$4 million for the year of the liberation of all the prisoners at the moment of the Israeli withdrawal.

## Impact of suggested actions on the priority objectives

	Poverty	Civil Society	Conditions for Women	Environment	Privote Initiate	Global Impact
Reintegration of the displaced	***	***			*	A
Reintegration of					<del></del>	
freed prisoners	***	***	•		*	Å
Literocy	***	*	***	•	•	A
Placement in enterprises	***	**	*	- !	•	В
Reintegration of orphons	***	**	•		*	В
Reintegration of handicapped	***	**		-	*	В
Professional training	**	*	*	- 1	*	(
Childhood		***	!	**		(
Educational support	**	*	-		•	(

# C5.3.5. Psychological support to the children of the South

The children of the South are among the most hard hit victims of the conflict, being deprived of normal conditions of psychological growing. NGOs are currently engaged in actions of psychological support, such as holiday camps and visits to other regions to provide exposure to different environments, open up new horizons, and gain different and constructive experiences.

This type of measure, most of the time supported by the presence of psychologists and taking place in a healthy environment, should be encouraged. The development programme can assist in conducting summer camps, from 20 to 30 days for a maximum of 60 children (five to 16 years old), at least half of whom originating from the South.

By supporting such projects at 70% costsharing, this will represent a grant of US\$20,000 per project. It is suggested to support three projects per year, or a yearly expense for the programme of US\$60,000.

### T28. Synthesis table of suggested assistance for the rehabilitation of human resources

Line of action	Indicative cost of the action: Initial investment (USS)	Indicative cost of the action: Yearly spending (USS)	Remarks
Professional training		200 000 /year	
Placement in enterprises	100, 000 in a year	80 000 / year	
Literacy		450 000 / year	
Educational support		150 000 / year	
Displaced/actions of accompaniment (without housing)		400 000 / year over 5 years	Action to start after the withdrawal
Training and economical reintegration of orphans		200 000 / year	Complementary action to that of the orphanages
Training and economical reintegration of handicapped		200 000 / year	
Economical reintegration of former prisoners		3 000 000 the first year 250 000 / year the following years 2 000 000 the year of withdrawal	
Childhood - psychological support		60 000 /year	

# C6. The rehabilitation of the administrative staff

The development programme of South Lebanon is not conceived to last more than a determined period of time during the conflict and directly following peace. It is, therefore, absolutely necessary to prepare the existing administrative organizations of the state and of local authorities to take over the handling of the development of South Lebanon.

Moreover, one of the objectives of the socioeconomic development programme is to rehabilitate the State administrative organizations, who have also suffered from the conflict.

The Lebanese government has recently engaged an ambitious policy of administrative reform, which should progressively result in improved efficiency of state services and local authorities.

Still, this policy concerns the whole country and is spread over many years. The urgency of the development plans to be put into action in the South, the size of the damages suffered by the administration, and the absence of the state from this region for tens of years, evidently demand that this process be accelerated in the South.

It is precisely the objective of the development programme to complete and accelerate the current administrative reform, but in no way replace it.

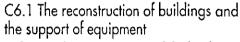
The suggested step consists of associating the concerned administrative organizations in the development programme starting from the time of its launching, and to accompany this partnership with specific actions aiming at improving the quality of the services, technical competencies, and the general performance levels.

The targeted administrations are those that have a direct presence on the ground and which are in principal concerned by the development programme, including:

- the local authorities of the Ministry of Agriculture and of its affiliated agencies (Green Plan, INRA, etc)
- the services of the antiquities management in charge of the archeological and patrimonial remains in the South;
- the water offices, including the Litani Office;
- the municipalities;
- -the technical services tied to the administrators of the mohafazats and cazas.

This rehabilitation of the administrative staff in South Lebanon will take different forms:

- the reconstruction of buildings and the supply of equipment;
- the supply of experts over the medium or long term;
- support for studies;
- training of employees;
- the conducting of specific joint programmes in certain domains: preservation of water resources, developmental research, and repression of corruption.

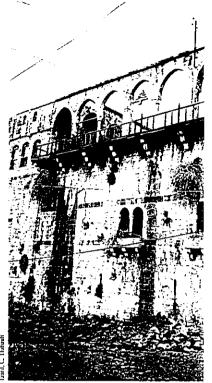


C6.1.1. The reconstruction of the local antennas of the Ministry of Agriculture

It is necessary to support the establishment of local antennas of the Ministry of Agriculture in every caza of the region, trained by an engineer or a team of engineers capable of providing assistance services in information and training to the farmers in each region.

This action covers a strategic importance in the putting into action of the agricultural development policy. It is represented by work on construction and equipment representing an average investment of US\$300,000 per antenna, or a total of US\$1.8 million for the six cazas (Nabativeh included).

The development programme can finance this action in favor of the Ministry of Agriculture, in order to accelerate the process of rehabilitation.



The Shehab palace at Hasbaya, Dec. 1998



Agricultural school constructed by the Ministry of Agriculture in the occupied

These antennas should be the place where all the public services involved in agriculture and rural development should be able to join in order to harmonize their interventions in each caza and supply an integrated assistance to the farmers in their region.

They will also be the place where the launching all the actions of the present development programme on agriculture will take place. The establishment of the programme in the administration premises will be essential to assure the sustainability of activities.

#### C6.1.2. Provision of equipment

The State administrations established in the South, and especially the municipalities, suffer from a lack of adequate equipment to execute their task. This includes office material (computers, photocopy machines, etc) and municipal equipment (for waste collection, for example).

The development programme can contribute to improve this situation by supporting the provision of equipment, over a limited duration (five years), and to foresee to this effect a budget of US\$2 million for the whole period, or US\$0.5 million for the decentralized administrations of the state, and US\$1.5 million for the municipalities with a base of US\$5,000 for 1,000 inhabitants.

# C6.2 Support of experts over medium and long term

The rehabilitation of the technical capacities of the administration demands technical support in the form of missions of experts for medium and long term (from six months to two years).

This type of support corresponds, for example, to what should be done to constitute a complete branch for an agricultural product, starting from production to marketing. It can also correspond to the elaboration of a municipal policy on the long term.

It is therefore suggested to fill, each year, a quota of eight high-level experts, or:

- two experts per year for agriculture (for the six antennas);
- two experts per year for archeology and tourism (especially after the end of the conflict);
- one expert per year in the domain of water (for the water offices);
- one expert per year in industry and trade;
- one expert per year for municipal and rural affairs, tied to the administrators of the two Mohafazats of the South;
- one expert per year for the municipal affairs of large cities, divided between Nabatiyeh and Tyre.

This number of experts demands a budget of US\$1 million if half are international experts and the other half are local experts.

# C6.3 Support and the realization of studies

The realization of the development programme implicates that the administration proceeds with a certain number of complementary studies including:

- a complete inventory of the touristic sites in the South;
- the establishment of a regional plan for
- the establishment of decrees for the protection of certain major sites;



- the establishment of urban planning for principal cities;
- the necessary studies for the management of water resources;
- the necessary studies for the modernization of agricultural branches;

These different studies should be led by the concerned line ministries, on their proper budgets. Therefore, in order to accelerate this process which is indispensable to the pursuit of the actions led on the ground, the development programme can support, totally or partially, the financing of these different studies.

A budget of US\$1 million per year for these studies is a minimum to cover all mentioned regions and sectors (without the cost of the study of the large project of irrigation). The development programme will be able to finance 50% of this budget, or a yearly credit of US\$500,000, a share equal to that of competent administrations.

#### C6.4. The training of employees

The performance of the administration staff is closely related at the level of their qualifications. The development programme can, to this end assist in organizing short sessions for technical training of employees of the state local and municipal authorities.

It is suggested to earmark a yearly credit of US\$150,000 to this type of training allowing to include a hundred employees who are not the under the Ministry of National Education.

For those under the ministry (teachers of the public sector), a more ambitious programme is suggested aiming at improving their qualifications through an extensive training of two months to one year. A budget of US\$500,000 should permit the training of 100 and 200 teachers per year.

# C6.5. The management of specific joint programmes

Over and above the budget for studies, foreseeing the necessary expenses in priority domains, that should become the responsibility of concerned state administrations, should also be considered.

#### C6.5.1. The initiation of steps for preservation of water resources

These steps consist of organizing quantitative and qualitative control campaigns to provide a census of all drilled wells, to discharge pollutants, to initiate construct bank basins, to conduct campaigns of awareness, etc.

The initiation of this activity demands specific support of the development programme, where it is proposed to contribute financially with an amount of US\$500,000, covering a period of five years.

# C6.5.2. The initiation of development research in agriculture

The engagement of efforts in development research demands a complete plan involving universities, the Ministry of Agriculture, and the representative organizations of farmers and industrialists. This step demands specific activities and different equipment to be provided to the universities or to the concerned administration.

Here too, it is suggested that the development programme provides an aid to the initiation of this activity totaling US\$500,000, covering a period of five years.

### C6.5.3. Support of veterinary norms

The quality and credibility of the produce from the South depends closely on the degree of respect for veterinary norms, the absence of cheating, and the possibility of promoting an image of authenticity. It is, therefore, particularly important in the perspective of the development programme, representing a joint responsibility of the Ministries of Agriculture and of Trade.

Actions towards this end will include:

- information campaigns for consumers and producers on veterinary norms;
- promotion campaigns of quality assurance;
- the introduction of standardized labelling;
- inspection of the premises of production, and conditioning of sale.

These actions can be the object of partnership between the concerned ministers and the development programme, to which the programme should contribute with a yearly budget of US\$50,000.

# C6.5.4. The management of municipal projects concerning public space

The encouragement of municipalities goes through the support to quality projects that they hope to initiate on their territory. The development programme will be able, in this respect, to reserve its support to the model projects in term of management of the public space.

A credit of US\$500,000 can be granted per year to this type of actions.

Impact of the suggested actions on the priority objectives

	Poverty	Civil Society	Conditions for Women	Environment	Private Initiate	Global Impact
Agricultural antennas	**	*	<u>.</u>	**	**	A
Experts long duration	*	**	•	***	*	A
Norms, labels	*	*	-	**	**	В
Municipal spaces		***		***	•	В
Training of employees	*	**	-	**	*	В
Studies	**		-	**	**	В
Waler steps	*	*		***	•	C
Steps R and D	*	-	-	**	**	C
Equipping of administrations	*	*	<u> </u>	*	*	С

T29. Synthesis table of suggested assistance for rehabilitation of the administrative staff

Line of action	Indicative cost of the action: Initial investment (USS)	Indicative cost of the action: Yearly spending (USS)	Remarks
Agricultural antennas	1 800 000 over 5 years		
Equipping of municipal services and of the state		400 000 / year	Duration: 5 years
Experts for long and medium term		1 000 000 / year	
Studies		500 000 / year	Excluding irrigation
Training of employees		650 000 / year	
Water preservation		100 000 / year	Duration: 5 years
Development research		100 000 / year	Duration: 5 years
Norms and labels		50 000 / year	
Municipal public spaces		500 000 / year	



# C7. The mobilization of means and actions of promotion

This last section of the development programme for South Lebanon concerns information and communication actions necessary to mobilize the concerned actors and assure the promotion of South Lebanon as a touristic and economic region of interest.

Some of these actions can be started immediately, whereas other actions will have to be launched after the end of conflict.

These actions are the following:

- the mobilization of NGOs;
- the mobilization of municipalities;
- the mobilization of donors
- the promotion of the South for investors;
- tourist promotion of the South.

#### C7.1. The mobilization of NGOs

The success of the development programme in the South depends much on the concentration of actions and the mobilization of all actors, including NGOs.

It will, therefore, be important to associate NGOs with the programme, which will demand the establishing of general coordination mechanisms, in addition to specific partnerships.

NGOs present in the South are numerous, in particular:

The Sadr Foundation, the Lebanese Association for the Protection Handicapped, the Lebanese Red Cross, the International Red Cross, the Lebanese Popular Aid, Amel Association, Al-Mabarrat, Iihad El-Binaa, CARITAS Lebanon, Save the Al-Majmouaa, Children. the Foundation, the Catholic Greek-Melkite Council for Development, the Scouts Al-Risala, the Social Service for the Welfare of the Children of Lebanon, Friends of the Handicapped, the Order of Malta, Medicines Sans Frontiers, YMCA, Mercy Corps, The Middle East Council of Churches, Green Line, The Society of Nature Protection,

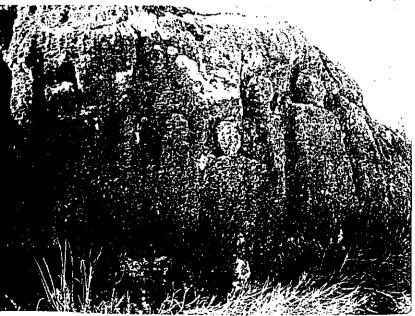
Amwaj, The National Association for the Lebanese Prisoners in Israeli Prisons, the Committee of Follow-up for Support of Prisoners, the Institution of Martyrs, Americans for Free Lebanon, the MIRSAD, Amnesty International, Maarouf Saad Foundation, Mouvement Social Libanais, Terre des Hommes, APSAD (Association for the Protection of Sites and Ancient Residences of Lebanon) and others.

These NGOs have spontaneously been regrouped on needed coordination requests and exchanges of information, such as the Collectif des ONG, the Lebanese Forum of NGOs, the Lebanese Environment Forum and the Lebanese Council of Women.

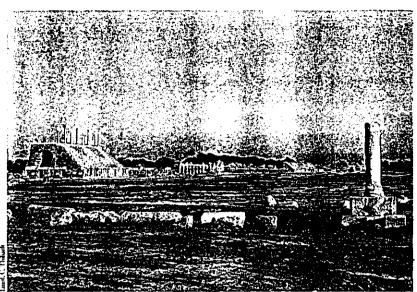
The initiation of the development programme of South Lebanon should be the occasion to mobilize all its voluntary unpaid resources. This will necessarily entail the organization of a series of meetings and by the settlement of partnerships conventions.

The development programme should foresee, to this fact, a credit of administrative fees for this mobilization activity, which should not exceed US\$20,000 per year.





if, C. Palanlı



Column of the Roman hippodrome in Tyre

C7.2. The mobilization of municipalities The municipalities elected in June 1997 are holders of many projects that the development programme will support in the framework of previously outlined activities. Still, the mobilization of municipalities will result in the same type of fees that were projected for NGOs, probably of the same sum.

#### C7.3. The mobilization of donors

The financing of the development programme rests on the institutional financial backers, but also on the Lebanese diaspora to support it. South Lebanon does not lack arguments to mobilize its donors. In fact, the development programme is there to fight against poverty, prepare for peace, support the population deprived by the war, and ensure socio-economical development and the rehabilitation of human, natural, and institutional resources.

Yet, the campaign to raise donor awareness should be correctly organized by preparing files and carrying out necessary contacts.

The donors can be mobilized during the current phase, without waiting for the end of the conflict. At the moment of the Israeli withdrawal, a second approach should be taken, including visits and meetings.

The logistical support for this mobilization of actors requires resources that should be pro-

vided by the programme, amounting to US\$20,000 per year till the end of with-drawal.

# C7.4. The promotion of the South aimed at investors

Whatever the level of public investment, the development of South Lebanon will rest on individual initiative and private investments. The mobilization of these investors should, therefore, be an integrated part of the development programme. It will be founded on the potentials of South Lebanon, in particular in the domains of tourism, small and medium industries, and service activities.

This mobilization should be actively led, in partnership with the actors established in the South. It can indicate an identified presence of South Lebanon in trade fairs in Lebanon and abroad, or the organization of economic actors' visits on the ground, or information support to be realized and spread.

This promotion policy demands a budget of US\$100,000 per year.



Litani valley below the castle of Beaufort



C7.5. Promotion of tourism in the South Promotion of tourism has a double aim: to attract tourists in order to develop the economy, and to positively evaluate the image of South Lebanon in public opinion, including that of potential investors.

It is, because of this fact, doubly important for the economic development of South Lebanon.

The development programme can, to this effect, support initiatives going in this direction, by financing, for example, 50% of initiated activities by municipalities or NGOs to establish centers of tourism training, to edit support forcommunication, to assure the presence at international fairs, and to organize events and campaigns of promotion.

This type of support can target five projects per year, to be selected in relation to their function and economic impact. Each project will be granted a maximum of US\$25,000, or a yearly average expense of US\$125,000.

T30. Synthesis table of suggested actions for the mobilization of means and for promotion

Line of action	Indicative cost of the action: Initial investment (USS)	Indicative cost of the action: Yearly spending (USS)	Remarks
Mobilization of NGOs		20 000 / year	
Mobilization of municipalities		20 000 / year	
Mobilization of donators		20 000 / year	
Mobilization of investors		100 000 / year	After the end of the conflict
Tourist promotion		125 000 / year	After the end of the conflict

## D. PHASING: The regional development programme in two phases

fter tracing the big axes of the development programme, it is essential to evaluate them in light of the probable evolutions of the situation in South Lebanon, and to suggest their future division into phases.

## This step entails analyzing:

- The probable evolution of the situation during the coming years, in particular with regard to the succession of phases;
- The socio-economical characteristics pertaining to each phase of this evolution;
- The objectives and priorities that are to be stipulated, generally speaking, for each of the phases;
- The content of the development programme for each of the phases.

# D1. The probable evolution of the situation during the following years

D1.1. The phases of evolution of the conflict

Considering the particular military and political situation of the studied region, it is indispensable to determine the evolution that might occur during, and even beyond, the period of implementation of the development programme.

This question has become difficult by the impossibility of predicting the moment when the actual situation could evolve towards a more favorable context. But being unable to determine this date, it is always possible to forecast possible future contexts and to suggest a methodology capable of thwarting this uncertainty.

Three scenarios can be reasonably expected for the future years in South Lebanon:

#### 1- Peace agreements

The first scenario to consider is, evidently, that of peace. The Lebanese government has emphasized, many times, that global and durable peace wished for South Lebanon can only result from a global agreement in the region, involving Lebanon, Syria, and Israel, to be translated, for Lebanon, by the recovery of its full and complete sovereignty stretching to its international frontiers.

In this case, the considered development programme could be deployed without interference, in a context of peace and progressive opening of frontiers and to the mobility of people and properties throughout the whole Middle East.

#### 2- Unilateral withdrawal.

The Lebanese government did not exclude the possibility of a second intermediary scenario which can occur in South Lebanon with the arrival of peace, consisting of a unilateral withdrawal of Israeli troops outside the occupied territories in Lebanon, conforming to the mechanisms of the resolution 425 adopted by the United Nations Security Council, with the exclusion of all other arrangements. In this case, the current politics can, most certainly, persist, and the frontiers of South Lebanon will be kept closed to all exchanges. However, South Lebanon will re-find its unity, and communication roads will be reopened between the south-west and the east, and between the non-occupied and the presently occupied parts of the region.

In this situation, putting the development programme in action will remain prudent, and will not exclude the realization of infrastructure for regional Near East exchange. However, most of the socio-economical rehabilitation actions could be undertaken. Some of these actions will aim at the medium and long term, whereas others will probably answer to emergency situations resulting from this type of unilateral withdrawal of the Israeli troops (displaced, combats at the last minute, different incidents etc).

3- The persistence of the present situation: This remains a pessimistic last scenario of the continuation of the present conflict, for a limited duration, under similar forms, accompanied with partial withdrawal or redeployment of the Israeli Army on the Lebanese territory, such movements not modifying the general state of the conflict.

In this case, only support actions to the resident populations can be foreseen to improve, as much as possible, their living conditions. This does not, however, exclude the management of development actions, in a moderated rhythm aimed at creating a progressive dynamism passing from assistance to development.

These three scenarios are not mutually exclusive. Actually, they will be, in one way or another, urged to follow each other.

In fact, the situation in South Lebanon will necessarily pass through the following four successive stages:

Stage 1: continued conflict for an undetermined timeframe;

Stage 2: Israeli withdrawal, unilateral or governed by global peace agreements;

Stage 3: consolidation of the post-conflict situation, with no exchanges at the frontier (if withdrawal occurs unilaterally without peace agreements), or limited exchanges (in the framework of peace agreements), because of transitory measures of economic protection while waiting for a removal of psychological obstacles (i.e. exchanges with the countries who have already signed agreements);

Stage 4: phase of consolidated peace, on the basis of global definite agreements, with normalized exchanges on the frontiers.

This process, in four stages, can happen at different speeds. However, it is reasonable to hope to reach Stage 3 within 10 years (withdrawal accomplished), and to consider that Stage 4 (peace and intensive exchanges at the frontiers) will be difficult to reach within this time frame.

Hence, it is suggested to organize the development programme of South Lebanon in phases: Phase 1: persisting conflict

Phase 2: consolidation of the post-conflict situation.

These two phases are separated by a turning point, the Israeli withdrawal.

Theoretically, reference duration of three years to the Phase I programme will be given. This duration is purely indicative and simply serves to simulate to forecast yearly expenditures, knowing that the situation can, at any moment, pass from Phase 1 to Phase 2 for all or a part of the territory. This will, evidently, demand adjustments to the programmed activities.

The programme reference duration of Phase 2 will be five years, which constitutes a minimum duration to obtain significant effects for such type of programme.

The management of the withdrawal itself, straddling on Phases 1 and 2, will demand a specific complementary programme extending over many months.

It is essential to examine, more attentively, the characteristics and stakes attached to Phase 1, to the period of withdrawal, and to Phase 2, and to select the activities that should be proposed in each of these phases.

UNO observation post in the region of Khiam



# D1.2. Socio-economical characteristics of the future phases

#### D1.2.1. Phase 1: Persisting conflict

The continuation of the conflict for months and years generates negative consequences that should be counterbalanced. In fact, during this period, it is possible that the following processes occur:

- New victims to take in charge: wounded, handicapped, orphans, freed prisoners;
- An accentuated depopulation of the occupied zone due to restraints imposed by the occupying forces, in particular the obligatory "military service" in the local militia for the youth:
- A growing economic dependency on Israel of the population in the occupied zone through employment in th occupied zone and in Israel itself or with the SLA:
- Additional destruction of infrastructure, houses and facilities;
- Destruction of industrial, agricultural, or services sector premises;
- Destruction of agricultural land, especially green fields more sensitive to fires;
- Impoverishment of certain categories of the population due to the absence of investments and jobs or, more directly, as a result of the loss of properties due to violence;
- A growth of the unemployment rate, especially among the youth;
- Deterioration in teaching conditions;
- Deterioration of the conditions of access to health care:
- Deterioration of the general sanitation situation due to the absence of efficient control in veterinary hygiene and as a result of water pollution;

- Irreversible deterioration in archeological sites and other patrimonial elements, susceptible to become major resources for future economic development of South Lebanon:
- Deterioration, not easily reversible, of the natural environment by the degradation caused by forest fires, the regression of terrace cultivation, and the absence of control for the pasture zones;
- Fires reducing the vegetation cover;
- Quantitative and qualitative deterioration of water springs and sheets due to the uncontrolled industrial waste, drilling of artesian wells without proper planning;
- Site deterioration around the borders of certain cities due to the weakness of urban control by the state.

This list is not exhaustive, but it clearly shows the Lebanese government the stakes, which are attached to this phase, consigned in the box opposite.

ì

ì



#### PHASE 1: PERSISTING CONFLICT

### To be ready to answer to emergencies

#### This includes:

- Repairing damaged infrastructure and public facilities;
- Support to the victims, in particular the wounded, the handicapped, and the orphans;
- Support to enterprises having been damaged by the war;
- Support to households in the reconstruction of their destroyed houses.

To maintain an acceptable level of public services

If the launching of large infrastructure projects, which could have also been destroyed, it is perfectly possible to assure optimal conditions of services, with the need of new rehabilitation activities for:

- Road condition, drinking water, water purification and electrical networks;
- Equipping and operating of health centers and schools;
- Administrative staff, especially in the agricultural, hydraulic resources and historical heritage domains, in addition to the necessity of reinforcing municipal action where municipal councils were elected.

## · To support the economic activity

Whether in the occupied or in bordering zones, it is very difficult to maintain the economic activities and revenues and jobs without external support. This should address existing economic sectors, in particular to actions of:

- Modernization and improvement of agricultural yields;
- Improvement of access conditions to credit and the creation of enterprises;
- Improvement in the qualification level of the workforce.

## To preserve resources for future development

It is indispensable to limit the deterioration of resources on which the future economic development of this region lies. This concerns in particular:

- Archeological sites and heritage, essential for the future development of tourism;
- Natural sites (in particular the beaches of Tyre, slopes of Mount Hermon, the forests of Jezzine and around Lake Qaraoun) for that same reason;
- Water resources, vital for this region.

#### D1.2.2. The period of withdrawal

The withdrawal can occur, as was afore-mentioned, with either global peace agreements, or unconditioned unilateral withdrawal as was foreseen in resolution 425 of the United Nations Security Council.

The withdrawal will be carried out within a period varying between a few days and a few months. However, "the withdrawal period" addressed here includes withdrawal preparations, actual withdrawal, and the management of its immediate consequences. The totality of this process can stretch over many months, and even more than one year, over riding Phases 1 and 2.

Withdrawal in stages is also a possibility, with varying duration between the different stages, as was the case in Jezzine at the beginning of June 1999. In this case, the freed regions will not be addressed by the foreseen programme for Phase 2, whereas other regions will always benefit from the programme of Phase 1.

The period of withdrawal can contain several aspects, which should be observed:

- Last minute military actions which can be started to "cover" the withdrawal of troops or to reach certain military objectives before the withdrawal. Such military actions can result in additional victims and additional destruction;
- Armed manifestations of joy in the cities and villages of South Lebanon, which may also result in victims (these manifestations were avoided in Jezzine);
- The possibility of "triumphal entries" of the militias, having participated in the resistance movement, to the cities and villages of the occupied zone, giving space to violence or humiliation against the families accused of collaboration (this type of acts have also been avoided in Jezzine);
- The first influx towards the South of tens of thousands of displaced/returnees, coming to

check on their properties in the villages they had to abandon for many years, with the risk of crowd of this type;

- The risk of acts of vandalism able to compromise the preservation of the heritage;
- The freeing of the last prisoners will demand immediate attention;
- The destiny of the SLA militiamen has not been foreseen upon withdrawal;
- The danger of mines, which will be accentuated in an immediate manner due to opening of all accesses between the occupied zone and the non-occupied one, and the disappearance of the demarcation line;
- The stake, for the state, to rapidly re-affirm its political and military sovereignty in the region, which can imply actions of disarmament;
- The logistic management of the return of the armed forces and the Lebanese police to the region, with attached problems: welcoming by the crowds, condition of the barracks and administrative buildings, etc;
- The necessity to control and organize the visits of Lebanese and foreign personalities;
- The political and military situation on the frontier, which demands particular treatment on behalf of the state.

This period, of a determined duration, may witness a successive and variant events, which need the presence of the State at all instances to respond to essential challenges (see box opposite page).

#### THE PERIOD OF WITHDRAWAL

### Being ready to answer to emergencies

These emergencies can be linked to the last minute military actions. The response should include:

- Help to victims, especially on the level of care centers;
- The rephasing of destroyed infrastructure;
- Fire protection;
- Emergencies;
- Emergency food aid.

### Mastering of internal security

- Through the deployment of armed forces;
- Through the interdiction of retaliation actions in the localities of the occupied zone;
- Through controlling the population flow towards the South;
- Through putting into action a progressive plan of disarmament;
- Through the delimitation of security perimeter around potential mine fields;
- Through media actions of information and awareness;
- Through the deployment at the frontier.

## Taking responsibility of certain categories

- Freed prisoners;
- Mobilized ex-militias.

## Assuring the return of the State

- Through vitalization of local administrations;
- Through retaking the political initiative (organization of commemoration manifestations);
- Through well-ordered organization of official visits to the South, especially of foreign visitors and potential donors.

**Phasing** 

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

#### D1.2.3. Phase 2: Consolidation

#### of the post-conflict situation

Phase 2, which will commence after the withdrawal, will be marked by rapid developments in the region. The challenge is to ensure that economic development keeps pace with demographic development, and that this development is sustainable through appropriate management of resources.

In fact, the first years following the withdrawal will be characterized by:

- Supported demographic growth, fed by a natural growth of 2.2% per year, in addition to a significant flow of returning displaced families, estimated at 48,000 persons during the first five years. The population of the five cazas, which is at present 261,000 inhabitants, will increase by:
- More than 19,000 additional inhabitants per year during the first two years;
- About 13,000 additional inhabitants per year during the three following years;
- About 7,000 additional inhabitants per year during the five following years.
- This demographic growth will impact on the need for the creation of additional jobs, to compensate the loss of jobs of the persons whose main source of income depended on the war economy or related grants. This increase in job creation should accompany a progressive increase of the employment rate of the population (which is today of 27%, lower than that at the national level at 31%). In total, 800 jobs should, on average, be created each year during the first five years that will follow the end of the conflict.
- The demographic growth will also entail a need for additional places in schools, demanding the immediate execution of projects of new premises described in the programme.
- The first years of the post-conflict situation will witness significant reconstruction of

houses and facilities. This will entail an important vigilance in the matter of urbanism, aiming at preventing the deterioration of urban and natural landscapes, which show the wealth of South Lebanon, and to prevent disfiguration of sensitive sites by quarries.

- It is hoped that these years will also witness the flow of investments to the industrial, commercial, and leisure sectors. It should be ensured that these investments will not be accompanied by a multiplication of pollution sources or by the deterioration of tourist sites of remarkable value.
- There will also be a delicate transition between a situation where the economy and the society are strongly supported by the public sector as a result of the conflict, and the return to community right. The price of support granted by the administration of tobacco to farmers of the South, the funds distributed by the Council for the South, the tolerance of the additional employees in the National Education Institute and other government administrations, are systems that will be weakened as the conflict ends. Public assistance will have to be re-oriented in a direction that aims at the amelioration of productivity rather than pure assistance.
- Finally, post-conflict years will be marked by an opening of markets, which poses the problem of the capacity of the South to assure a certain degree of competence without waiting for the end of convalescence.

All these elements urge, on behalf of the government, the placing of a real development plan for South Lebanon at the end of conflict, capable of creating the necessary jobs for this region and improving its productivity, in preserving its resources and attractiveness.

Ì

#### PHASE 2: CONSOLIDATION OF THE POST-CONFLICT SITUATION

A development of the economic sectors capable of creating jobs

- Services
- Tourism
- Industry

#### An improvement of agricultural productivity

- By irrigation
- By new diversification techniques
- By the renovation of agricultural extension services

An approach shifting assistance and aims at creating a spirit of enterprise

- In privileging the approach through enterprise advise;
- In facilitating the creation and establishment of enterprises;
- In improving the qualification of the workforce.

An effort to create a favorable environment for economic activity

This concerns all infrastructure development: roads, electricity, telecommunications, water, sanitation, waste treatment, etc.

## Reverting to national norms of the public services

- Training establishments;
- Health establishments;
- Decentralized administrations of the state;
- Municipalities

# D2. Phase I: persistence of the conflict

The previous considerations lead the selection of foreseen actions that address the needs of this phase (persistance of conflict).

This selection should be governed by the following criteria:

- For actions of economic development: to postpone to a later phase activities related to tourism, commercial and industrial investments, but to start the modernization policy of agriculture.
- For social actions: to start social development, while adjusting professional training based on the needs of the economy and to redirect financial assistance to actions of development.
- For the reconstruction of houses, schools, and administrative buildings: to adjust the actions to respond to opportunities and immediate needs.
- For the infrastructure: to postpone the heavy irrigation project of the South through Conveyor 800 (problematic layout of frontier region in the present phase) and the reconversion of tobacco cultivation, while actively continuing the needed studies and spreading investments for other infrastructure projects. Priority should be given to water and sanitation networks.

Also, it is suggested to distinguish between the activities that have to be postponed to Phase 2, those which can commence at a moderated rhythm, and those which can be kept in their peak during Phase 1.

# D2.1. Actions to be postponed to Phase 2

In the economic domain, postpone activities related to tourist promotion, archeological sites, site management, emergence of the building of summer resorts and tourist facilities. Similarly, postpone to Phase 2 the mechanism of the re-conversion of tobacco cultivation, this mechanism being dependent on the

realization of the large irrigation project of the South through Conveyor 800.

In the social domain, postpone the actions accompanying the return of the displaced return, this return being conditioned by the cessation of the conflict.

In the domain of infrastructure, postpone the large irrigation project, the Conveyor 800, though not without ceasing the related studies to this project.

# D2.2. Actions to be managed at a moderate speed

Certain actions can be strongly supported during this phase. These include:

- Improving the rate of financial access to entrepreneurs, considering the weakness of investment projects during the present phase;
- Supporting the projects of food industries, which will demand lower financial credit during the present phase, for the same reasons;
- Support to the activity zones;
- Promotion of agricultural labels of the South;
- Reforestation:
- The reconstruction of administrative buildings;
- The road works and road signs, except the coastal highway;
- Work on municipal public spaces;
- Mine clearance and the prevention against mines.

Certain actions can be fairly supported with a proposed speed. These include:

- The creation and functioning of a nursery of enterprise coupled with an extension service: this programme should be started but will not become fully implemented until Phase 2;
- Opening of new lands for cultivation;
- Regrouping (of land);
- Support to the marketing of agricultural produce;
- The valorizing of patrimonial sites;
- The equipping of schools;



- The development of technical education;
- Professional training;
- The service of placing job seekers in enterprises;
- Provision of material and equipment to the state municipal services;
- Placement of long and medium-term experts in administrations:
- Development research in agricultural;
- Control and respect of veterinary norms and the repression of cheating;
- The mobilization of investors.

Finally, certain actions can be lightly moderated, including:

- Rehabilitation of school premises;
- Sanitation works;
- Rehabilitation of drinking water networks.

## D2.3. Actions to be initiated

These actions are the following:

- Provision of micro-credit;
- Light irrigation projects;
- Agricultural cooperatives;
- Nurseries for seeds and plant;
- Experimental breeding farms;
- Agricultural orientation and extension services;
- Assistance in fertilizers and herbicides:
- Regulatory rules and decrees;
- Equipment and extensions of hospitals;
- The equipping of health centers;
- Illiteracy sessions;
- Education support actions;
- Economical integration of the former prisoners;
- Training and economic integration of the orphans;
- Training and economic integration of the handicapped;
- Psychological support to children:
- Local antennas of the Ministry of Agriculture;
- Studies for the administration rehabilitation:
- Training of employees;
- Steps to preserve water resources;
- Mobilization of NGOs;
- Mobilization of municipalities;
- Mobilization of donors.

## D2.4. The content

of Phase 1

Considering the above, it is possible to present the programme of Phase 1 under the form of a consolidated budget, at indicative values (see the following table).

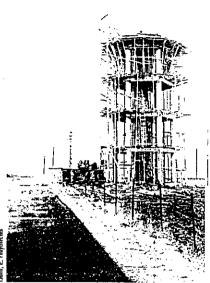
This budget has a total sum of about USS100 million per year of territorial credit and is composed of four sections:

- Actions of socio-economical development: US\$7 million to 9 million per year, or 8% of the total.
- Actions relevant to infrastructure and equipment: US\$42 million to 54 million per year (taking into consideration that 70% of the concerned works have assured financing and are already programmed by the state).
- Actions of social assistance: about USS45 million per year, of which US\$20 million are for tobacco farmers (handled by the administration), the entity making 44% of the total (here too, the financing of these actions is already assured by the budget of the Council for the South and the Tobacco Administration).
- Mine clearance: a provision of US\$500,000 per year is stipulated, amounting to less than 0.5% of the total. There is no assured financing of this part.

Social and economic development actions necessitate high-level competencies, which are not available at present in state administrations.

Propositions for their putting into action are developed in the following chapters of this report. A specific line is identified at the end of this section for the cost of experimentation of these actions (10% of their sum).

Actions relative to infrastructure and equipment, which enhance the competence of the state and municipalities services. A series of observations shows the available information for the present involvement of these services in such actions.



Construction of water tower in Aamra by the Council for the South, Dec. 1998

Social assistance actions are listed as a reminder, knowing that they are essentially the responsibility of the Council for the South, or the Tobacco Administration, and that they are not included in the investment logic (in broad terms: economical, physical, human, etc) as other development actions or those related to the infrastructure.

Mine clearance is under the responsibility of the army. It is shown in this budget as a reminder, with an indicative sum for provision.

This budget is to be considered with care: with the exception of the section concerning the socio-economical development programme for other sections: it indicates only a share of the necessary public expenditures, which could have been identified and divided into territories.

The total budget (about US\$100 million per year) is to be brought closer to about US\$80 million which is currently being spent (or budgeted) by the state in this region. This is done especially through the budget of the Council for the South (more than US\$50 million mainly spent in the South), the budget of the Tobacco Administration (US\$20million of grants for only South Lebanon), and the work on the coastal highway and hospitals (about US\$10 million per year).

This budget of US\$100 million is also to be brought closer to the total amount of yearly investments of the Lebanese State, all sectors included, which is at present at the order of US\$1 billion.

The majority of the announced budget is a budget of investment (only the part "assistance" is under operating budgets). It has the major share of the investments of the state (especially transportation, water, electricity, sanitation, construction of schools, etc), except investments earmarked for administrative reform, the construction of public buildings, and studies. For these three parts, the programme

budget will bring complementary investments to those budgeted by the state in the framework of its national programme.

The budget does not integrate the investment that should be budgeted from municipal budgets. Here too, it compliments the municipal budgets destined to accelerate the projected works.

)

T31. Integrated development programme for South Lebanon: Indicative budget for Phase 1- conflict persistence. Reference duration: 3 years - SECTION 1: DEVELOPMENT

Line of Action	Year 1	Year 2	Year 3	Average per year	% col.	Observations
SMI and tertiary	310 000	442 000	455 000	402 333	4.81	
Nurseries & advice	200 000	300 000	300 000	266 667	3.19	
Credits at improved rates	100 000	130 000	140 000	123 333	1.47	
Activity places	10 000	12 00	15 000	12 333	0.15	
Agriculture	1 155 000	1 640 00	2 085 000	1 626 667	19.44	
rrigation, light projects	400 000	600 000	840 000	613 333	7.33	
Cooperatives	200 000	200 000	<b>200 0</b> 00	200 000	2.39	
Nurseries	100 000	150 000	150 000	133 333	1.59	
Experimental breeding farms	150 000	250 000	300 000	233 333	2.79	
Opening new lands	100 000	150 000	200 000	150 000	1.79	
Orientation and advice	75 000	75 000	75 000	75 000	0.90	
Fertilizers and herbicides	25 000	25 000	25 000	25 000	0.30	
Regrouping (of land)	5 000	5 000	10 000	6 667	0.08	
Feed industry	10 000	20 000	20 000	16 667	0.20	
Marketing	30 000	50 000	100 000	60 000	0.72	
Norms and labels	10 000	15 000	15 000	13 333	0.16	
Reforestation	50 000	100 000	150 000	100 000	1.20	
		<u> </u>		1		
Environment & sites	270 000	440 000	640 000	450 000	5.38	
Acress to sites	150 000	250 000	400 000	266 667	3.19	
Rules and decrees	20 000	40 000	40 000	33 333	0.40	
Municipal public spaces	100 000	150 000	200 000	150 000	1.79	In addition to municipal expenses
Human resources	2 715 000	2 240 000	1 590 000	2 181 667	26.08	
Micro-credits	250 000	250 000	250 000	250 000	2.99	
Professional training	50 000	100 000	200 000	116 667	1.39	
Placement in enterprises	50 000	<b>75 000</b>	75 000	66 667	0.80	
Literacy	50 000	100 000	200 000	116 667	1.39	
Educational support	50 000	100 000	150 000	100 000	1.20	
Integration of orphans	100 000	150 000	200 000	150 000	1.79	
Integration of the handicapped	100 000	150 000	200 000	150 000	1.79	
Integration of former prisoners	2 000 000	1 250 000	250 000	1 166 667	13.95	
Assistance to children	60 000	60 000	60 000	60 000	0.72	
Protection from land mines	5 000	5 000	5 000	5 000	0.06	
Administrative staff	1 225 000	2 175 000	2 385 000	1 928 333	23.05	In addition to to the ministries' budgets
Agricultural antennas	150 000	300 000	360 000	270 000	3.23	
Administrative equipment	200 000	200 000	200 000	200 000	2.39	
Experts (long term)	200 000	500 000	500 000	400 000	4.78	
Studies	200 000	500 000	500 000	400 000	4.78	
Training of employees	300 000	500 000	650 000	483 333	5.78	
Water	100 000	100 000	100 000	100 000	1.20	
Steps R & D	50 000	50 000	50 000	50 000	0.60	
Norms and regulations	25 000	25 000	25 000	25 000	0.30	
Mobilization	110 000	110 000	110 000	110 000	1.31	
NGOs	20 000	20 000	20 000	20 000	0.24	
Municipalities	20 000	20 000	20 000	20 000	0.24	
Donors	20 000	20 000	20 000	20 000	0.24	
Investors	50 000	50 000	50 000	50 000	0.60	
Other expenses	1 500 000	1 700 000	1 800 000	1 666 667	19.92	
Unforseen	750 000	850 000	900 000	833 333	9.96	
Piloting of the programme	750 000	850 000	900 000	833 333	9.96	
TOTAL	7 285 000	8 747 000	9 065 000	8 365 667	100	

SECTION 2: INFRASTRUCTURE AND EQUIPMENT

Line of Action	Year 1	Year 2	Year 3	Average per year	% col.	Notes
Educational & health equipment	5 350 000	6 550 000	6 650 000	6 183 333	1.,76	
Rehabilitation of schools	200 000	200 000	200 000	200 000	0.41	
Construction of schools	1 100 000	1 100 000	1 100 000	1 100 000	2.27	
Equipment for schools	1 500 000	2 500 000	2 500 000	2 166 667	4.47	
Technical education	500 000	700 000	800 000	666 667	1.38	
Hospitals	500 000	500 000	500 000	500 000	1.03	Indicative credits. Construction ended
Free health centers	50 000	50 000	50 000	50 000	0.10	Equipment (Ambulances)
Public buildings	1 500 000	1 500 000	1 500 000	1 500 000	3.09	
Roads and Port	12 920 000	13 120 000	13 120 000	13 053 333	26.93	
Coastal highway	10 000 000	10 000 000	10 000 000	10 000 000	20.63	Current site of work
Rehabilitation Tyre-Nagoura	0	0	0	0	0.00	Project of Phase 2
Tracks Nabatiyeh-Rachaya	0	0	0 -	0	0.00	Project of Phase 2
Principal roads	1 000 000	1 000 000	1 000 000	1 000 000	2.06	•
Secondary roads	1 000 000	1 000 000	1 000 000	1 000 000	2.06	
Municipal roads	500 000	500 000	500 000	500 000	1.03	
Bus stations and squares	100 000	100 000	100 000	100 000	0.21	
Sign posting	20 000	20 000	20 000	20 000	0.04	The essential of the effort is put off to Phase 2
Port of Tyre	300 000	500 000	500 000	433 333	0.89	•
Drainage	11 500 000	16 500 000	18 500 000	15 500 000	31.98	
System in Tyre	3 000 000	5 000 000	6 000 000	4 666 667	9.63	USS25 million CDR financed EIB, IBRD and funds of municipalities
System in Nobatiyeh	2 000 000	5 000 000	6 000 000	4 333 333	8.94	USS6.5 million CDR financed IBRD and funds of municipalities
Rehab, other existing systems	3 500 000	3 500 000	3 500 000	3 500 000	7.22	,
Hew work in other localities	3 000 000	3 000 000	3 000 000	3 000 000	6.19	caza of Bint-Jbeil
Electricity	2 735 000	2 735 000	2 735 000	2 735 000	5.64	
Network 66 kv	1 800 000	1 800 000	1 800 000	1 800 000	3.71	
Network 15-20 kv	730 000	730 000	730 000	730 000	1.51	
Transformers	205 000	205 000	205 000	205 000	0.42	
Telephone	500 000	500 000	500 000	500 000	1.03	
Telephone	500 000	500 000	500 000	500 000	1.03	Site of work slowed by the situation of conflict
Waste	2 000 000	2 000 000	2 000 000	2 000 000	4.13	
Waste	2 000 000	2 000 000	2 000 000	2 000 000	4.13	Works essentially municipal
Water	8 500 000	8 500 000	8 500 000	8 500 000	17.54	
Rehabilitation networks	8 000 000	8 000 000	8 000 000	8 000 000	16.50	About USS51 million CDR financed
Project Canal 800	500 000	500 000	500 000	500 000	1.03	by the French Protocol Studies
<del>- '</del>						Diodies
TOTAL	43 505 000	49 905 000	52 005 000	48 471 667	100	

#### Phasing

#### SECTION 3: ASSISTANCE

Line of Action	Year 1	Year 2	Year 3	Average per year	% col.	Notes .
Dependents of deceased	1 500 000	1 500 000	1 500 000	1 500 000	3.32	Expenditure of Council for the South
Wounded	1 500 000	1 500 000	1 500 000	1 500 000	3.32	Expenditure of Council for the South
Medical assistances	200 000	200 000	200 000	200 000	0.44	Expenditure of Council for the South
Allowances to prisoners	2 000 000	2 000 000	2 000 000	2 000 000	4.42	Expenditure of Council for the South
Allowances for damages	20 000 000	20 000 000	20 000 000	20 000 000	44.25	Expenditure of Council for the South
Grants to tobacco cultivation	20 000 000	20 000 000	20 000 000	20 000 000	44.25	Expenditure of the Tobacco Administration
Total	45 200 000	45 200 000	45 200 000	45 200 000	100	

## SECTION 4: MINE CLEARANCE

Line of Action	Year 1	Year 2	Year 3	Average per year	% col.	Notes
Mine clearance	500 000	500 000	500 000	500 000	100	Provision

## TOTAL PROGRAMME PHASE 1

	Year 1	Year 2	Year 3	Average per year	% col.	Notes
Section 1 : Development	7 285 000	<b>8 7</b> 47 000	9 065 000	8 365 667	8.16	Financing to be identified
Section 2 : Infrastructure and equipment	43 505 000	49 905 000	52 005 000	48 471 667	47.27	70% already finance
Section 3: Assistance	45 200 000	45 200 000	45 200 000	45 200 000	44.08	Financing budget of the State (CS) & tobacco administration
Section 4 : Mine dearance	500 000	500 000	500 000	500 000	0.49	Provision, financing to be found
GENERAL TOTAL	96 490 000	104 352 000	106 770 000	102 537 333	100	

# D3. Indications for the specific programme during the period of withdrawal

The programme during the withdrawal period should be superimposed to those of Phases 1 and 2. Actually, it is about a specific plan of actions, which is essentially under the responsibility of the army, the internal security forces, and the civil defense.

Still, certain specific actions directly under the responsibility of the development programme should be recalled, including:

- The immediate start of the awareness actions for the prevention against the danger of mines, in particular directed to children and farmers;
- Considering significant funds to face the liberation of the prisoners;
- The necessity to respond to an increased effort in terms of the mobilization of donors and investors, especially through the organization of site visits and information and media campaigns.

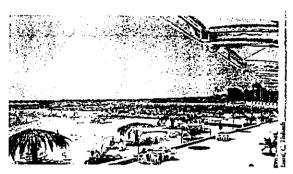
Also, this specific programme is detailed in the following indicative budget, of an approximate sum of US\$1.6 million, of which US\$10 million is for mine clearance operations.



The principal stake of the withdrawal period will be the security of the population

### T32. Specific programme for the withdrawal period

Lines of Action	Sums
Mine clearance (provision)	10 000 000
Prevention against mines	100 000
Allowances prisoners	2 000 000
Insertion prisoners	2 000 000
NGOs: Complement for mobilization	30 000
Municipalities: complement for mobilization	20 000
Donors: complement for mobilization & receiving	100 000
Investors: complement for mobilization & receiving	50 000
Actions of emergencies (provision)	1 000 000
Other unexpected	1 000 000
Total	16 300 000



The region offers promising tourism opportunities

# D4. Indications for the Phase 2 programme of consolidation and post-conflict

The Phase 2 programme should finally allow the launching all the development activities in South Lebanon.

During this period, the following orientations will be able, in particular, to be kept.

- Progressive extinction of assistance expenses, especially those related to the war damages and the allowances given to prisoners;
- Launching of large equipment projects allowing the acceleration of development while providing jobs in sufficient numbers to respond to the flow of job seekers (return of displaced and the end of the war economy);
- Progressive start of the conversion mechanism of tobacco cultivation allowing to assure a sufficient living standard to the farmers while economizing the present grants for the state budget;
- Progressive improvement of moderated economy of variant resources, especially tourism, services, and small and medium industries;
- Progressive disengagement of the support actions to the administrative rehabilitation in South Lebanon, especially after elections of new municipal councils in deprived localities.

The Phase 2 programme can be illustrated by through an indicative budget as shown below.

This budget amounts to nearly US\$163 million the first year, increasing regularly to reach US\$136 million in the fifth year. This increase is due especially to the progressive decline in assistance expenditures (allowances to the victims and subventions of the tobacco administration) that will be done at that the cessation of the conflict. The engagement in a policy of re-conversion could be accelerated if the political, economic, and social conditions allow it.

The share of the socio-economic development activities amounts to 17% (USS10.5 million without the mechanism of tobacco cultivation).

The share of the infrastructure development amounts to 67%, which is normal in the per-

spective of development, especially with the launching of the large irrigation project in the South.

The share of assistance expenses amount to less than 15% (against 44% in Phase 1), destined to disappear by the 10th year if the policy of re-conversion of tobacco cultivation is carried on with determination. This process can even be accelerated.

Mine clearance, which causes problems of deciphering considering the uncertainty as well as the amount of work, was credited at a height of USS9 million during this phase (of five years), to be added over the provision of US\$10 million in the framework of the specific programme during the withdrawal period.



Phase 2 should involve the launching of large infrastructure works allowing job creation to the displaced returning to the South, while also developing the region. Here, the Litani dam.

T33. Integrated development programme for South Lebanon for Phase 2: consolidation of the post-conflict situation Reference duration: 5 years - SECTION 1: DEVELOPMENT

Line of Action	Year 1	Year 2	Year 3	Year 4	Year 5	Total 5 years	% col.	Notes
SMI and tertiary	705 000	1 025 000	1 175 000	1 075 000	1 075 000	5 055 000	3.90	
Nurseries & advice	300 000	300 000	300 000	200 000	200 000	1 300 000	1.00	
Credits at improved rates	200 000	400 000	500 000	500 000	500 000	2 100 000	1.62	
Activity places	<b>30 0</b> 00	50 000	50 000	50 000	50 000	230 000	0.18	
Touristic promotion	75 000	125 000	125 000	125 000	125 000	575 000	0.44	
Rural rest houses	100 000	150 000	200 000	200 000	200 000	850 000	0.66	
Agriculture	7 325 000	9 525 000	14 925 000	14 825 000	14 725 000	61 325 000	47.37	
Irrigation, light projects	840 000	840 000	840 000	840 000	840 000	4 200 000	3.24	
Cooperatives of materials	200 000	200 000	150 0000	150 0000	100 000	800 000	0.62	
Nurseries	150 000	150 000	100 000	100 000	<b>50 0</b> 00	550 000	0.42	
Experimental breeding farms	300 000	300 000	200 000	100 000	100 000	1000 000	0.77	
Opening new lands	200 000	200 000	200 000	200 000	200 000	1 000 000	0.77	
Orientation and advice	75 000	75 000	75 000	75 000	75 000	375 000	0.29	
Fertilizers and herbicides	25 000	25 000	25 000	25 000	25 000	125 000	0.10	
Regrouping (of land)	10 000	10 000	10 000	10 000	10 000	50 000	0.04	
Feed industry	75 000	75 000	75 000	75 000	75 000	375 000	0.29	
Marketing	100 000	100 000	100 000	100 000	100 000	500 000	0.39	
Norms and labels	50 000	50 000	50 000	50 000	50 000	250 000	0.19	
Re-forestation	300 000	500 000	500 000	500 000	500 000	2 300 000	1.78	
Reconversion Iobacco	5 000 000	7 000 000	12 600 000	12 600 000	12 600 000	49 800 000	38.47	
Environment & sites	1 470 000	1 470 000	1 470 000	1 470 000	1 470 000	7 350 000	5.68	
Access to sites	750 000	750 000	750 000	750 000	750 000	3 750 000	2.90	
Delegate management of sites	100 000	100 000	100 000	100 000	100 000	500 000	0.39	
Archeological sites	000 08	80 000	80 000	80 000	80 000	400 000	0.31	
Rules and decrees	40 000	40 000	40 000	40 000	40 000	<b>200 0</b> 00	0.15	_
Municipal public spaces	500 000	500 000	500 000	500 000	500 000	2 500 000	1.93	Complements to
								municipal expenses

SECTION 1 : confinued

Lines of Actions	Year 1	Year 2	Year 3	Year 4	Year 5	Total 5 years	% col.	Notes 7
Housing	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	10 000 000	7.72	
Assistance to the reconstruction	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	10 000 000	7.72	Assistance other than from
			İ			<u> </u>		the allowances for damage
Human resources	3 245 000	2 145 000	2 145 000	1 995 000	1 795 000	11 325 000	8.75	
Micro-credits	250 000	250 000	250 000	250 000	250 000	1 250 000	0.97	
Professional training	100 000	100 000	100 000	100 000	100 000	500 000	0.39	
Placement in enterprises	80 000	80 000	80 000	80 000	80 000	400 000	0.31	-
Literacy	300 000	450 000	450 000	450 000	450 000	2 100 000	1.62	
Educational support	150 000	150 000	150 000	150 000	150 000	750 000	0.58	
Integration of orphans	200 000	200 000	200 000	200 000	200 000	1 000 000	0.77	
The handicapped	200 000	200 000	200 000	200 000	200 000	1 000 000	0.77	
Integration of prisoners	1 500 000	250 000	250 000	100 000	100 000	2 200 000	1.70	
Integration of the displaced	400 000	400 000	400 000	400 000	400 000	2 000 000	1.39	
Assistance to children	60 000	60 000	60 000	60 000	60 000	300 000	0.23	
Protection against mines	5 000	5 000	5 000	5 000	5 000	25 000	0.02	
Administrative staff	3 160 000	3 160 000	3 100 000	2 380 000	1 860 000	13 660 000	10,55	In addition to
		<u> </u>				<u> </u> ·		ministries' budgets
Agricultural antennas	360 000	360 000	300 000	200 000	100 000	1 320 000	1.02	
Administrative equipment	400 000	400 000	400 000	200 000	200 000	1 600 000	1.24	
Experts (long term)	1 000 000	1 000 000	1 000 000	700 000	400 000	4 100 000	3.17	
Studies	500 000	500 000	500 000	400 000	300 000	2 200 000	1.70	
Training of employees	650 000	650 000	650 000	650 000	650 000	3 250 000	2.51	
Steps water	100 000	100 000	100 000	100 000	100 000	500 000	0.39	
Steps R & D	100 000	100 000	100 000	100 000	100 000	500 000	0.39	
Norms and cheating	50 000	50 000	50 000	30 000	10 000	190 000	0.15	
Mobilization	160 000	160 000	160 000	130 000	130 000	740 000	0.57	
NGOs	20 000	20 000	20 000	10 000	10 000	80 000	0.06	
Municipalities	20 000	20 000	20 000	10 000	10 000	80 000	0.06	
Donors	20 000	20 000	20 000	10 000	10 000	80 000	0.06	
Investors	100 000	100 000	100 000	100 000	100 000	500 000	0.39	
Other expenses	4 200 000	4 200 000	4 200 000	3 800 000	3 600 000	20 000 000	15.45	
Unforseen	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	10 000 000	7.72	
Piloting of the programme	2 200 000	2 200 000	2 200 000	1 800 000	1 600 000	10 000 000	7.72	
TOTAL	22 265 000	23 685 000	29 175 000	27 675 000	26 655 000	129 455 000	100	

SECTION 2: INFRASTRUCTURE AND EQUIPMENT

Line of Action	Year 1	Year 2	Year 3	Year 4	Year 5	Total 5 years	% col.	Notes
Educational & health equip.	17 550 000	17 550 000	17 000 000	8 100 000	8 100 000	68 300 000	13.67	
Rehabilitation of schools	1 000 000	1 000 000	500 000	0	0	2 500 000	0.50	
Construction of schools	<b>2</b> 700 <b>0</b> 00	2 700 000	2 700 000	2 700 000	2 700 000	13 500 000	2.70	
Equipment of schools	3 500 000	3 500 000	3 500 000	3 500 000	3 500 000	17 500 000	3.50	
Technical education	1 300 000	1 300 000	1 300 000	1 300 000	1 300 000	6 500 000	1.30	
Hospitals	500 000	500 000	500 000	500 000	500 000	2 500 000	0.50	Indicative credits
								construction accomplished
Free health centers	50 000	50 000	0	0	0	100 000	0.02	
Public buildings	8 500 000	8 500 000	8 500 000	100 000	100 000	25 700 000	5.14	
Roads and port	28 400 000	28 400 000	28 300 000	36 800 000	35 800 000	157 200 000	31.56	
Coastal highway	20 000 000	20 000 000	20 000 000	20 000 000	20 000 000	100 000 000	20.01	
Rehabilitation Tyre-Naqoura	1 000 000	1 000 000	500 000	0	0	2 500 000	0.50	
Track Nabatiyeh-Rachaya	0	0	0	10 000 000	10 000 000	20 000 000	3.79	
Principal roads	3 000 000	3 000 000	3 000 000	3 000 000	3 000 000	15 000 000	3.00	
Secondary roads	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	10 000 000	2.00	
Municipal roads	700 000	700 000	700 000	700 000	700 000	3 500 000	0.70	
Bus stations and squares	200 000	200 000	100 000	100 000	100 000	700 000	0.14	
Sign posting	500 000	500 000	500 000	500 000	0	2 000 000	0.40	
Port of tyre	1 000 000	1 000 000	1 000 000	500 000	Ô	3 500 000	0.70	
Drainage	18 500 000	18 500 000	14 500 000	0	0	51 500 000	10.31	
System in Tyre	6 000 000	6 000 000	2 000 000	Ō	0	14 000 000	2.80	Indicative credits: depend on
System in Nabatiyeh	6 000 000	6 000 000	6 000 000	0	0	18 000 000	3.60	work accomplished before the withdrawal from the zone of Tyr Indicative credits: depend on work accomplished before the withdrawal from Nabatiyel
Rehab, other existing systems	3 500 000	3 500 000	3 500 000	0	0	10 500 000	2.10	ldem
New work in other localities	3 000 000	3 000 000	3 000 000	0	0	9 000 000	1.80	Idem
		5 000 000	4 200 000	3 000 000	2 000 000	21 200 000	4.24	
Electricity	7 000 000				ŀ	2 000 000	0.40	
Network 66 kv	2 000 000	1 000 000	0	0	0	2 200 000		
Network 15-20 kv	1 000 000	1 000 000	200 000	0	0	17 000 000	0.44 3.40	
Sub-stations (capacity)	4 000 000	4 000 000	4 000 000	3 000 000	2 000 000			
Telephone	2 000 000	2 000 000	2 000 000	0	0	6 000 000	1.20	
Telephone	2 000 000	2 000 000	2 000 000	0	0	6 000 000	1.20	Indicative credits: depend on the work accomplished
Waste	3 000 000	3 000 000	3 000 000	3 000 000	3 000 000	15 000 000	3.00	
Waste	3 000 000	3 000 000	3 000 000	3 000 000	3 000 000	15 000 000	3.00	Municipal essential work
Water	28 000 000	38 000 000	38 000 000	38 000 000	38 000 000	180 000 000	36.02	
Rehabilitation networks	8 000 000	8 000 000	<b>8 000 0</b> 00	8 000 000	8 000 000	40 000 000	8.00	Indicative credits: depend or work accomplished
Project Canal 800	20 000 000	30 000 000	30 000 000	30 000 000	30 000 000	140 000 000	28.02	before withdrawal Project of USS400 million over 13 to 15 years
TOTAL	110 250 000	118 250 000	112 300 000	94 700 000	92 700 000	528 200 000	100	·

## SECTION 3: ASSISTANCE

Line of Action	Year 1	Year 2	Year 3	Year 4	Year 5	Total 5 years	% col.	Notes
Dependents of deceased	0	0	0	0	0	0	0.00	Yearly budget of the Council for the South
Wounded	200 000	200 000	100 000	50 000	50 000	- 600 000	0.55	Yearly budget of the Council for the South
Medical assistance	50 000	<b>20 0</b> 00	0	0	0	70 000	0.06	Yearly budget of the Council for the South
Allowances to prisoners	1 000 000	200 000	0	0	0	1 200 000	1.10	Yearly budget of the Council for the South
Allowances for damages	10 000 000	3 000 000	500 000	0	0	13 500 000	12.34	Yearly budget of the Council for the South
Grants to tobacco cultivation	20 000 000	20 000 000	20 000 000	18 000 000	16 000 000	94 000 000	85.95	Expense of the Tobacco Administration
Total	31 250 000	23 420 000	20 600 000	18 050 000	16 050 000	109 370 000	100	

## SECTION 4: MINE CLEARANCE

Lines of Actions	Year 1	Year 2	Year 3	Year 4	Year 5	Total 5 years	% col.	Notes
Mine clearance	5 000 000	2 000 000	1 000 000	500 000	500 000	9 000 000	100.00	Provision

## TOTAL PROGRAMME PHASE 2

	Year 1	Year 2	Year 3	Year 4	Year 5	Total 5 years	% col.	Notes
Section 1 : Development	22 265 000	23 685 000	29 175 000	27 675 000	26 655 000	129 455 000	17.43	
Section 2 : Infra-equipment	104 450 000	112 450 000	107 000 000	88 900 000	86 900 000	499 700 000	66.85	
Section 3 : Assistance	31 250 000	23 420 000	20 600 000	18 050 000	16 050 000	109 370 000	14.63	
Section 4 : Mine clearance	5 000 000	2 000 000	1 000 000	500 000	500 000	9 000 000	1.20	
GENERAL TOTAL	162 965 000	161 555 000	157 775 000	135 125 000	130 105 000	747 525 000	100.00	

rann rrang pari ince i ibject oup

ramn. **\** ibject

# E. THE EXECUTION OF THE REGIONAL DEVELOPMENT PROGRAMME

he execution of the development proramme demands adequate institutional grangements and the mobilization of a group spartners.

Ince launched, the programme should be the abject of periodical evaluations on the base of a roup of indicators permitting the verification of the extent to which the objectives of this programme have been achieved. These are the three abjects of this section.

# E1. The institutional arrangements

The execution of the development programme demands that the administrative and technical organizations responsible for its execution are accurately identified.

This is more important since South Lebanon currently witnesses a confusing situation with a multitude of organizations working there, line ministries, the Council for the South, the Council for Development and Reconstruction, High Relief Committee, and other various autonomous organizations.

Therefore, it will be important to analyse along three lines:

- Firstly, to define the principals which should govern the institutional choice for the execution of the programme, based on the nature of accomplished tasks, their inter-dependence, and the present institutional context, by seeking advice, if necessary, from foreign experiences:
- Secondly, to examine the existing institutions in order to evaluate their capacities to assume a part of the required tasks;
- Finally, to suggest appropriate institutional arrangements.

# E1.1. The organization principals E1.1.1. Problem background

As was previously indicated, the four parts of the development programme of South Lebanon (economical and social, infrastructure and equipment, social assistance, and mine clearance) appeal to different logics of treatment.

Mine clearance is the responsibility of the army. It is not a question of debating the institutional arrangements concerning this part. However, an interface should be found between mine clearance operations on the one hand, the prevention actions addressed to the population, and the re-using of cleared areas for agriculture, tourism, or habitat, on the other hand.

The infrastructure and equipment should be under the responsibility of competent ministries and municipalities, as and when the current effort of administrative reform allows this. The current recourse available to the CDR and, in emergency cases, to the High Relief Committee or the Council for the South, should be progressively blurred.

Assistance actions are currently under the responsibility of three entities: the Council for the South for handling allowances to victims, the Tobacco Administration for the support provided to farmers, and the Ministry of Social Affairs for supporting specific programmes for orphans, disabled, and deprived persons. The problem posed in this domain concerns less the administrative efficiency than the transparency of assistance and the availability of objective information.

Socio-economic development actions included in the programme pose, finally, a real problem of leadership since none of the public organizations currently posseses the necessary technical capacity to conduct these types of activities in a direct way. Hence, this will demand staffing of persons external to the administration under contractual agreements.

In other regards, and in order to stop the terms of institutional debate, it is important to emphasize that the four parts of the development programme are intimately inter-linked. There cannot be any socio-economic development founded on only one part. If mine clearance does not take place, the entire programme of Phase 2 will have to be revised. If adequate infrastructure is not realized, it will be useless to plan actions in the economic sectors. And, inversely, if, for example, actions of training, agricultural reorientation and rehabilitation of the local services of the Ministry of Agriculture do not take place, the infrastructure projects of irrigation will lose their meaning.

It is significant to research the simultaneousness of envisaged actions and by consequence, a strong coordination of the actions of different public interventions, which means that the responsibility of the programme should benefit from a strong political support, especially when the executors are numerous.

Coordination unity does not mean that steps should be centralized. Excessive centralization of activities will result, in addition to the absence of the field realities, in failure to gain from the wealth acquired by the network of associations and non-governmental organizations for the execution of the programme.

Finally, the necessity to move towards institutional arrangements capable of being replicated in other Lebanese regions that need to be developed should be pointed out. It will be damaging to make heterogeneous choices at the mercy of the regions on which a new effort is being launched. From this point of view, the arrangements that are proposed for the South should be registered in the logic of the development of peripheral regions and the management of the Lebanese territory hoped for by the government.

Therefore, a solution capable of conjugating all these imperatives should be found:

- maximum efficiency;
- the will to progressively strive towards a re-

spect of competencies of different public organizations in order to lead the actions which are under their respective responsibility, in the logic of the current administrative reform;

- good articulation of administrative reform;
- an insertion in the global vision of managing the Lebanese territory;
- strong coordination of the different intervening parties;
- strong political support;
- a reduction of the effects by the mobilization of the local partners.

These questions are not only appropriate to South Lebanon. They have already been posed, nearly in the same terms, in most of the experiences of reconstruction or development throughout the world. It is, from this point of view, interesting to go over these experiences.

# E1.1.2. The solutions adopted in some other foreign experiences

Many experiences of reconstruction throughout the world, led after a war or a natural catastrophe, or to face a situation of severe underdevelopment of a part of a territory, have been examined.

We can classify the institutional solutions adopted in these experiences of reconstruction in four large categories or models, as follow:

Model 1: An ad hoc structure endowed with the power of execution;

Model 2: An ad hoc structure endowed with the power of coordination;

Model 3: An authority instituted in the structure of an existing ministry;

Model 4: Cells responsible for the reconstruction in the structure of several ministries.

We can also classify the structures created depending on the nature of their attachment to the central power and their direct implication to the local level:

Model A: An agency attached to the chief of state or the Prime Minister;

Model B: A hierarchical structure going from the central level to the local one;

Model C: A regional structure supporting the intervening public and private parties.

These different models can be described as follow:

Model 1: An ad hoc structure endowed with the power of execution.

• This option is widely adopted in situations following catastrophes and, more particularly, in post-war situations. This is due to the natural tendency for centralization of decision making in these types of situations.

The ad hoc structure can take the form of a ministry, a superior council, or an executive agency.

- The Ministry of Reconstruction created in France after the Second World War clearly illustrates this model. This ministry was charged, not only with the planning of reconstruction, but also financing, and piloting on the ground.
- A more recent example is provided by the Ministry of Reconstruction of Croatia, created in April 1992 (relayed few months later by the Ministry of Construction and Environment).
- In Lebanon, the creation of the Council of Development and Reconstruction in 1977, an autonomous agency directly under the responsibility of the Prime Minister and the Council of Ministers and charged with pursuing the policy of reconstruction and its financing, responds to the same type of logic.

This type of solution should be particularly considered when facing a context of recurrent disaster, such as the permanent risks of earthquakes which led Turkey to follow this model from 1960 and till today.

Model 2: An ad hoc structure endowed with the power of coordination.

· Soon after the Second World War, Japan

created an agency for the reconstruction of war damages established under the authority of municipalities, giving them the rights over proper reconstruction planning.

- In the same manner, soon after the civil war in Nigeria, the Federal Ministry of Economic Development and Reconstruction was established in 1970, entrusted with the coordinating of resource allowances intended to the different ministries.
- In Bosnia-Herzegovina, this same model was institutionalized, however in a sophisticated manner, soon after the Yugoslavia conflict. With the disappearance of the government itself, an international group of execution (International Management Group) was created on the initiative of the international community. Its mission was to link local operators with the international community, and to act as the catalyst for international investments. The group carried out, in liaison with the local operators (ministries. specialized and administrations, etc) and international agencies (United Nations Agencies, banks, donors, NGOs), an inventory of war damages and post-war needs, the prioritization of needs into a hierarchy, the conception of projects, the piloting of projects, and the execution of master plans.
- The structure "Habitat" put in place by the United Nations in Kaboul, in Afghanistan, responded to the same context of governmental authority disappearance, and was under a similar coordination model. Its mission consisted of coordinating the interventions of the international donors, while assuring a role of mediation in the conflict of interest in urban regions.

Model 3: An institutionalized authority within the structure of an existing ministry.

 In Egypt, following the 1973 war, the Ministry of Housing was restructured in order to take into consideration the problems of reconstruction, and was renamed the Ministry of Housing and Reconstruction. This solution did not give satisfaction insofar as the ministry had a natural tendency to privilege the financing of its own housing programmes to the detriment of the reconstruction programme.

Model 1: A central structure endowed with the power of execution

Advantages	Disadvantages
The advantages of this type of formula lie in the youthfullness of these structures, the clear definition of their tasks, and the limited bureaucracy by concentrating decisions in one place.	This model moves away from the classical structures (especially ministries). The new structure generally lacks practical operational experience in arranging the projects to be executed. The placed structure is generally set upon a temporary basis, which often results in employees finding themselves more preoccupied by their personal future than by the projects they have to execute.

#### Model 2: A central structure of coordination

Advantage	Disadvantages
This type of model presents the advantage of not de-motivating the existing administrative structures, which are also mobilized, for reconstruction work.	The absence of the power to take decisions can lead, even when this type of structure is set up in a ministry, to the incapability of imposing points of view or resolving a conflict that can arise on the ground, whether between administrations or between the state and the citizens.

Model 3: Mission entrusted to an existing ministry

Advantages	Disadvantages
This type of solution can present savings with respect to the creation of new structures.	As indicated in the example of Egypt, one can fear that the agency which temporarily executes reconstruction activities, continues to privilege its traditional activities.

Model 4: Cells spread in ministries

Advantages	Disadvantages
This model assures at the same time close coordina- tion and high motivation of all the concerned ad- ministrations.	Certain problems of competency can accompany this type of solution.

Model 4: Cells responsible for the reconstruction within the structure of many ministries.

· The Iraqi experience of reconstruction of Bassora and of FAO soon after the Gulf War in 1990 has many things in common with this model. The Superior Council Reconstruction was responsible for coordinating the activity of ministries and in turn had to reorganize in order to face this task by creating specialized cells within its structure. The experience was successful enough in spite of a few problems of confusion of responsibilities, which appeared at its Saunching.

Models of attachment to the central power and their implication on the local level:

Model A: An agency attached to the highest authorities of the state.

• The Jamaican government placed a team directly attached to the Prime Minister, and composed of employees delegated by each of the ministries, with the mission of coordinating the activities of ministries.

Model B: A hierarchical structure going from the central to the local level.

In Iran, the organization of the reconstruction includes a "Superior Council" composed of the Prime Minister, the Minister of Interior, and a representative of the Presidency. A "Central Committee for the Reconstruction and Rehabilitation", composed of 14 representatives of ministries and chaired by the Minister of Interior. This committee is responsible of the execution of the reconstruction programme, organization on the level of provinces, with a "Team for Reconstruction and Rehabilitation" composed of Chiefs of Service of the administrations at the provincial level, and chaired by the Governor of the province. And, finally, "Auxiliary Teams" within provinces, responsible of a sector or a determined region (a district in ruins, for example) composed of volunteers and trained by the Imam of the Province.

Model C: A regional structure supporting the private and public intervening parties.

 For the development of the Moroccan rural areas (6 million inhabitants), the Kingdom of Morocco created an "Agency for the promotion of Socio-Economic Development of the Provinces of the North" with the mission of guiding, in a coherent manner, the development of this territory, coordinating the activities of the central administrations and the local collectivity, co-financing of projects, and training partners' networks, in particular the representative of states and European organizations who financed the programme. The agency is directly attached to the Prime Minister, and is endowed with the Council of Orientation (advisory), formed representatives of external donors.

#### E1.1.3. The "ideal" organization

Based on what has preceded, and in abstraction to the present Lebanese institutional landscape, the ideal mechanism for taking the responsibility of the development programme for South Lebanon would be the following:

- A development agency for South Lebanon, similar to the development agency of the north Moroccan territory, composed of high level professionals all with required competencies for the execution of the development programme;

- This agency will itself lead the socioeconomic development activities, and will assure the coordination between other public intervening parties (infrastructure, social assistance, mine clearance). It will assure the follow-up and evaluation of the entire programme;

- This agency will benefit from direct attachment to the head of the state, the Prime Minister or to Council of Ministers. Similar mechanisms can be provided for the North and the Bekaa;

- The administrative management of the agency will be assured by a senior employee having at his/her disposal the moral and administrative authority to mobilize the decentralized services of the state, as well as its autonomous offices and public establishments.

- Every minister involved in this programme will name a permanent representative of the

Model A: Agency attached to the highest authorities of the state

Advantages	Disadvantages			
The attachment to the highest level of the state is a sign of efficiency, even when it does not have an execution function of projects.	This structure, is not in direct touch with what is happening in the field, which can lead to appreciation errors and to an insufficient exploitation of the means that can be mobilized at the local level.			

Model B: Hierarchical system going from the central to the local level

Advantages	Disadvantages
This model assures maximum mobilization of the human and administrative resources.	Assigning several organizations to the same subject or to working in the same region can lead to disorders in the execution of the projects.

Model C: Regional agency supporting public and private intervening parties

Advantages	Disadvantages
The formula held from by agency co-financing of initiated projects by the local collectivities or the administrations, gives real power to this agency and allows it to efficiently assure its coordination role. Its local attachment is also a positive point. The direct link it keeps with the donors permits the shortening of the instruction delays of the financing files.	The increase in co-financing can slow down the exe- cution if the government wheels are not aligned.

concerned ministry to the development agency. This person at the same time will be in charge of the actions conducted by the ministry in South Lebanon;

- The development agency will be endowed with an administrative autonomy and some financial autonomy;

- The agency will benefit from a derogatory regime for the execution of the projects, compensated by a submission to the control of the inspection organizations of the state;

- It will have a strong presence on the ground allowing for an efficient management of different intervening actions;

- This agency should have the capacity to mobilize the local forces, using different means and communications;

- It should have a perfect credibility in the eyes of the international financial community, of whom the main partners can be entrusted to join a committee for the follow-up of the programme. It is important to verify the

concordance between the existing structures in Lebanon and this ideal profile before proposing other scenarios.

# E1.2. Examining the existing organizations

The enumeration of existing organizations has to examine the judicial cadre in which these operate and to point out the strengths and weaknesses of each with regard to the required pre-requisites for the execution of the development programme in South Lebanon.

#### E1.2.1. The classical administrations

Most of the ministries will have a role to play in the execution of the development programme for South Lebanon.

The current administrative reform should allow, over the long term, to provide the services of the ministries with the required efficiency and which is currently lacking in many domains.

Considering the financial, social, and cultural difficulties, this process of reform may take several years to be accomplished. Also, in the case that the development programme for South Lebanon will be systematic entrusted to these authorities, it runs the risk of being seriously constrained.

Hence, the need arises to delicately identify the tasks that may be entrusted to competent ministries, and to institutionalize a strong mechanism for follow-up that will allow the programme to avoid delays and administrative bottle-necks. In other regards, it should be noted that the suggested development programme contains specific activities of supporting the rehabilitation of administrative management, with particular emphasis on the local services of the Ministry of Agriculture.

#### E1.2.2. The Council for the South

The Council for the South is capable of assimilating, from a strictly judicial point, the concept of a regional development agency as mentioned above.

This council is an autonomous agency attached to the Prime Minister and directed by an administration council of three members named by the Council for Ministers (including the President) for a duration of five years. It has at its disposal a proper administration and a budget included in the general budget of the state.

The Council for the South was established by Decree no. 14649 of June 12, 1970, based on Law no. 9/70 of June 2, 1970, authorizing the government to create this entity. It is directly attached to the Prime Minister.

The Law no. 09/70 specified that the Council for the South will be responsible for employing the financial means granted to the council through the state budget to "respond to the needs of the southern region and to assure the conditions of security and peace". This mission encompassed several components.

Also, Decree no. 14649, while repeating the terms of the law in order to define the mission of the council, provided the Council for the South with the following tasks;

- conducting studies or commissioning studies to private or public organizations;
- executing projects or contracting their execution to private or public organizations;
- receiving financial donations placed in a special chapter of the state budget.

Based on the Decree no. 4014 of March 31, 1981, the Council for the South has, in other regards, benefited from an exceptional regimen exempting it from observing the public accounting standards (with specific rules defined to the council). The council does not fall under the control of the Court of Accounts (with keeping of control in posteriori).

This decree has also specified that the Council for the South could:

- establish a plan of action and programmes;
- directly name its employees.

In Decree no. 4113 of July 1st, 1981, the Council for the South was given more flexibil-

ity in the management of its finances. The president of the council can, thus, pay advances using pre-payment order, hire at posteriori, in several cases, including: "help and immediate services to the victims, authorize urgent expenses upon the decision of the president, expenses which context or nature does not permit their management in habitual way". This same decree has opened more possibilities of concluding market agreements unlike other administrations.

The administrative staff of the Council for the South includes, according to the terms of the Decree no. 5596 of September 22, 1982, a total of 209 employees, of whom 164 are executives and 45 are staff. The Council also has a certain number of contractual employees. In reality, this is a relatively heavy administration, having more than 600 salaried persons (officials and contractual), excessively bureaucratized, with three sections:

- The General Directorate organized in six sub-management units, 16 specialized offices (one to three executives per office), and seven local branches in the major localities of the cazas;
- Financial control organized in three offices;
- The general secretariat organized in two offices.

During the past 10 years, the activities of the Council for the South cost more than US\$200 million, mainly for allowances given to the victims and small projects of infrastructure, and equipment.

### E1.2.3. The Council for Development and Reconstruction

The CDR was created by the Law no. 5 of January 31, 1997. It is attached to the Council of Ministers. The CDR is charged with:

- a mission of planning: establishing a general plan, sector plans, reconstruction and development programmes, and proposals of socio-economic policies;
- a mission of putting in coherence public investments, through propositions of

investment funding destined for reconstruction and development;

- a mission of programming, through propositions to the Council of Ministers of particular projects of reconstruction and development;
- a mission of territorial management, through establishing a general plan of territorial management under the approval of the Council of Ministers;
- a follow-up mission with donors, by maintaining coordination with the concerned public entities, relations with the international organizations and donor states, maintaining a financial relations with them;
- a mission of diffusing information through the preparation and publication of general and statistical studies in socio-economical domains;
- a training mission of the state services and local authorities through encouraging the central and local administrations of conceiving and proposing new projects;
- a mission of institutional advice, through proposals for creating or developing financial establishments or mixed societies involved in the development process, or even institutional reforms in the public sector.

To accomplish its missions, the CDR has at its disposal large prerogatives for the execution and financing of projects:

- Preparation of feasibility studies;
- Execution of projects contained in the development plan, as well as any project demanded by the Council of Ministers. This execution is conducted by an intermediary agency, private or public, chosen by the CDR, subject to the administrative authorizations legally required;
- Launching of loans to finance projects, the Council of Ministers being able to guarantee by decree the contracted loans by the CDR;
- Increase of loans to public, semi-public, or private organizations;
- The resources of the CDR may include, other than its endowment in the state budget and the contracted loans, revenues drawn from its proper investments.

The CDR, therefore, looks like a strong agency, capable of assuring the management of financing of all development programmes, directly assuring its execution through other intermediaries, or even by direct aids to private enterprises (under the form of loans).

It is managed by an Administration Council of 12 members, including the President. It employs about 300 persons, of whom 50% are high-level executives. The remuneration scale applied for the CDR has allowed the recruitment of qualified personnel. The CDR has initiated, since its creation, projects of a cumulative sum of about US\$4 billion.

#### E1.2.4. The High Relief Committee

The High Relief Committee was established by Order no. 35/1 of the Prime Minister on December 17, 1996, this order having been confirmed by the law - Decree no. 22 of March 18, 1977. Its board is chaired by the Prime Minister himself, and is composed of nine ministers (Vice President of the Council of Ministers, and ministers of Defense, Health, Social Affairs, Interior, Finance, Public Works, Hydraulic and Water Resources, and Housing).

The HRC is charged with:

- receiving all assistance of all nature and origin granted to the Lebanese State for helping the victims of catastrophes of any nature including armed conflicts;
- transporting and storing these aids;
- distributing them;
- gathering needed statistics and information;
- establishing rules for managing the receipt and distribution of assistance.

This mission can be executed through intermediary public administrations, or through the Secretariat of the HRC (the Secretary General of the HRC is part of the cadre of the Prime Minister), the decision being within the competence of the HRC itself.

The donations managed by the HRC are not subject to any customs or revenue taxes of any kind.

The HRC can ask for the assistance or the help of any public administration.

It is more particularly helped by:

- The Director General of Social Affairs;
- The Director General of the Central Fund for the Displaced;
- The Director General of the Council for the South:
- An Army Commanding Officer designated by the Ministry of Defense;
- A Commanding Officer of the Interior Security Forces designated by the Minister of Interior:
- The Director of the Directorate of International Organizations of the Ministry of Foreign Affairs.

Finally, it should be noted that the law allows the Prime Minister to decide, by Order taken after the consent of the Council for Ministers, to modify the mission of the HRC.

The High Relief Committee is not granted with a proper administration. It often acts through sub-contracting enterprises. But it has sometimes constituted temporary teams to put into action particular programmes.

Definitely, the HRC looks like a structure capable of managing the delicacy of donations, their execution and distribution. Its field of operation is, however, strictly limited to the notion of "relief to the victims". Development actions are not, theoretically, included in the prerogatives of the HRC, neither are they devolved of it. The Council of Ministers can, at any time, re-orient the mandate of the HRC.

#### E1.2.5. Other organizations

It is also appropriate to list the following public agencies having an important role of this type:

- The Tobacco Administration, which practises a policy of social support through subsidizing prices it grants to tobacco cultivators (8,000 farmers in the South);
- The Litani Office, whose irrigation projects have a direct effect on the agriculture of the South.

### E1.2.6. Strengths and weaknesses of the actual institutional mechanism

Examining the different public intervening agencies in the South provides a clear idea of the available maneuvering margin in the immediate future without administrative reform.

An organization, the CDR, is totally detached by its technical nature, the volume of its activities, its experience in relations with financial backers, the quality of its agents and its operational capacity. Hence, this agency is competent to propose development strategies, plan investments, manage the territory, follow-up on financal backers, and coordinate the state services and the local authorities.

The ministries' administrations have a clearly lower operational capacity and their personnel, with the exception of the high level staff, seem to lack the motivation and the technical capacity found in CDR. The current administrative reform should progressively improve their output. Meanwhile, it is convenient to measure their capacity assuming this before deciding on granting them with new execution or piloting responsibilities.

The Council for the South, which should play the role of a regional development agency, has progressively evolved towards a function of social assistance, with a preponderant part of its budget assigned to indemnity of victims and to social assistance of families struck by the conflict. Its investments in the drilling of wells, the installment of electrical transformers, the construction of equipment or the road surfacing, as beneficial as they can be, are both properly registered in the framework of a pre-defined development policy. They present, more likely, responses to demands expressed locally and generally deal with small projects. This agency cannot, in its present state, assume a role different from the one it currently has, particularly in the framework of a qualitatively innovative programme.

As far as the High Relief Committee is concerned, it has the mandate to respond to emergencies, but not to conduct development projects. The government can, indeed, create a similar agency (the Council of Ministers is restrained by a general secretariat without any proper administration) to execute the development programme of the South, or change the mandate of the HRC in this direction. This will organize the governmental execution of this project, but will keep the core of the operational arrangement problems on the choice of the administration (or administrations) in charge of the fund.

With this administrative set-up, being what it is, one should be conscious of the necessity to proceed with arrangements that are based on existing agencies, whatever their weaknesses are, without waiting for the completion of the administrative reform, ultimately changing later to "ideal structures" defined above.

### E1.3. The proposition for institutional organization

It is convenient, based on the preceding section, to define the optimal operational arrangement within the present context, and to outline the tracks of its later evolution. Two suggestions are presented here: the first for the immediate term (using existing agencies), the second for the medium term (evolution towards a sustained scheme).

#### For the immediate term

The evacuation of the region of Jezzine gave the government the occasion of reflecting on the question of the intervention in the projects of rehabilitation and development during an emergency. This experience is important because it shows, in a very concrete manner, that it is necessary to immediately take a decision.

In the case of Jezzine, starting from the first day following the evacuation, the government sent to the region a work team composed of representatives of the CDR, the HRC, and the Council for the South, having the mandate to evaluate the state of the areas, to list the projects to be executed, and to start the necessary immediate work. It has then asked the Mayor to guide this group and to coordinate the interventions of the different parties. Later on, ministers went to the region to identify the needs and the expectations. Then, an attempt of coordination between existing municipalities took place. While these lines were in accordance, there were also some talks of visits to be programmed for financial backers, and of steps towards potential investors.

This chain is correct. It places the basis of an organization to be found, to which we suggest the following lines:

- The development programme for South Lebanon should be directly guided by the Prime Minister and regularly discussed in the Council for Ministers;
- The Prime Minister could designate a representative, a Secretary General for the Programme, in the person of a high official having a rank higher to that of the Mayor who is capable of addressing issues on behalf of the Prime Minister. This function may be assured by the President of the CDR (as per the prerogatives of the CDR in the matters of regional development programmes) or by a high official outside the official cadre;
- The piloting of the development programme by the Prime Minister or his representative essentially consists of coordinating the activities in the South of the CDR, the HRC, the Council for the South, and the Army (for mine clearance). A coordination mechanism should therefore be institutionalized between these four authorities. The most appropriate formula is that of periodic meetings which can be opened, under the instruction of the Prime Minister, to representatives of different ministries, the Mayor, or to experts in different domains.
- The CDR, considering its legal competency,

will play a key role in this coordination by providing the permanent secretariat of the coordination meetings;

Ì

- A clear repartition of the tasks will be stopped:
- The CDR will assure the following tasks: 1. The relations with the financial backers and the institutional partners of the programme; 2. The yearly adjustment of the development programme (planning); 3. The guarantee of expected progress of the development programme; 4. The coordination of the infrastructure works (whether realized by the CDR or by ministries); 5. The realization of a part of the infrastructure work on behalf of the ministries or municipalities; 6. The execution of the "socio-economical development" (the most complex of all the programme) by counting on a team of locally established highlevel consultants; 7. The follow-up and the periodical evaluation of the programme.
- The Council for the South will proceed with its social action as foreseen in the assistance part of the general programme, but its intervention in the execution of construction and equipment works should decline and cease later;
- The High Relief Committee will proceed with his activities in the domain of response to emergencies, of whatever nature. This activity should cease after the accomplishment of the withdrawal;
- The army is naturally in charge of the "mine clearance" part of the general programme;
- The operational team locally established by the CDR to execute the "socio-economic development" part of the general programme should include a Project Director, a co-Director responsible of the mobilization of local partners network, a financial coordinator, and persons responsible of units in each of the following sectors: economic actions, water, agriculture, social action, equipment, information and promotion, collection and

processing of data. Hence the team will have around 10 experts in total. The team will be able to lead useful activities in partnership with public agencies such as IDAL or the National Employment Office.

- On the financial level, the funds granted by the State to the HRC, the Council for the South, the CDR and the different ministries, through its general budget, will continue to be separated by the different agencies, providing coordinated programming and consolidated commitments to the acknowledgment of the development programme of the South, managed by the CDR. In return, the funds issued for donations and loans of financial backers will be assigned, by the CDR, to determined infrastructure, socio-economic development, and mine clearance projects. Those funds (of external origin) assigned to infrastructure projects will be managed and established according to the usual rules (the CDR or Ministries depending on the specific case), whereas those funds assigned to the "socio-economic development" part of the programme should be managed in the framework of joint programmes between the CDR and the donors, as was experimented with the UNDP, which allows to associate the donors with activities, to decentralize the engagements at the level of the operational teams localized on the field, and to soften the mobilization of available means.

This organization that has just been described is close to "the ideal organization" described above. The principal difference lies in the necessity of coordinating the ad hoc activities that the agencies are already implementing in the field. Otherwise, we can hope that it fills in all the criteria of success: attachment to the highest authorities of the state, credibility in the eyes of the financial backers, local establishment, etc.

Moreover, by the preponderant role this scenario grants to the CDR, this organization puts the premises of a rational conduct of future regional development programmes which will be established to benefit other regions of Lebanon, and for which only the CDR can bring the total national coherency in the framework of homogeneous planning between regions.

Still, in the very short term, establishing this mechanism demands the following:

- Reunite the officials of the CDR, the HRC, the Council for the South, and the army to inform them about the retained mechanism;
- Appointing the person in charge of the programme, acting on behalf of the Prime Minister, represented by the President of the CDR or by a high civil servant or Military Official:
- Commission the CDR by a decision of the Council for Ministers or of the Prime Minister:
- Start establishing the records of projects necessary for the mobilization of first financing;
- Integrate the development programme for the South in the multi-yearly planning of State investments;
- Mobilize the first external financing;
- Identify the human resources capable of constituting an operational team that the CDR should establish on the field;
- In the case of availability of the first financing for "socio-economic development" part, proceed with the recruitment of the operational team and establish it locally for an immediate start of its activity.

The joint programme of the UNDP and the Lebanese State relative to South Lebanon, which is at the origin of the present report and which contains yet few achievements, should be mobilized in the framework of this process, in particular what concerns the recruitment of the operational team, the establishment of the first records of the project, the search for the first financing, and the start of the project on the field.

#### For the medium term

It will be appropriate at a later date (especially after the cessation of the conflict) to evolve the agency described above in a spirit of return to common right.

The basic principal that should govern this evolution is the rationalization of the state interventions in regional development programmes throughout the country.

The exceptional circumstances which resulted in the creation of agencies such as the Council for the South or the HRC, or having the Tobacco Administration intervene in the social policy of the South and the Bekaa, should disappear, taking with them the reasons of their existence and their interventions.

From the experience in the South, it will be possible to define a homogeneous approach to all development problems in the different regions of Lebanon, in the framework of a similar vision of the national development.

This necessitates, in the short term, the elaboration of the strategic framework of this policy for the management and development of the Lebanese territory, which includes a policy for managing human, natural, and economic resources which should be at the disposal of the country, with the perspective of sustainable development. This approach should be led on the national plan and on the level of different regions.

This reflection should be initiated, on the terms of the Lebanese law, by the CDR.

It will then be possible to integrate the regional development programmes, such as those in the South or Hermel, or those that will become indispensable for the North and other regions, in this same frame work, resulting in unified and coherent programming on the national level.

This programming should be within the mandate and under the responsibility of the CDR.

. :

We can then imagine a return to a normalized situation in which the CDR proposes the programming of investments to be realized in the various regions and coordinates their execution by the ministries and the operational teams constituted for each of the regional programmes.

Within this perspective, the development programme for the South will be integrated in this national step, with interventions, which will be:

- The CDR for programming, coordination and the search for financing;
- Ministries, each in its area of concerns, for the execution of investment projects;
- The operational team for the direct social and economic actions and for the integrated follow-up of for the duration of the programme.

1



## E2. Resource mobilization and the search for partnerships

The development programme for South Lebanon cannot succeed without the largest number of partners, whether financial or others bringing in-kind contributions.

The stakes in the development of South Lebanon are of such an importance, in many regards, that many partners will positively respond to the call from the Lebanese government to participate to this project.

Also, should we organize this mobilization of partners, which demands a delicate identification of the organizations that might be interested. This is precisely the subject of this section.

This question will be tackled through examining the following categories:

- The partners and institutional financial donors:
- The international non-governmental organizations;
- The local non-governmental organizations.

The general principals that should govern one or many resource mobilization campaigns will be outlined.

### E2.1. Institutional partners

The international community cannot remain indifferent to the problem of the socio-economic development of South Lebanon.

The proposed development programme joins, in fact, its major pre-occupations which are, in particular, the fight against poverty and social distress, the preservation of the natural resources and the heritage, and the reinforcement of citizenship and civil society.

Moreover, the geographical situation of the South and the nature of the present conflict represent a subject of permanent anxiety to the international community. Therefore, the con-

sidered socio-economic development for this region cannot but hope that this international community can participate in forming the future of this region of the world.

Currently, the most concerned parties in South Lebanon are the most politically involved in the tentative settlement of the conflict: the United Nations, the United States, France and the European Union and, finally, the Arab countries.

Other parties also set their heart to see this region of the world commit itself to the track of development, and associate itself to the necessary efforts in order to reach this goal.

### E2.1.1. Partners of the bilateral cooperation

Many states have already strongly invested in supporting the physical, economic, social, and institutional reconstruction of Lebanon. The most significant support (many tens of millions of dollars) came from Saudi Arabia, Kuwait and France. Other support has come from the United Arab Emirates, the United States of America, Germany, Canada, Italy, and Spain. Other countries have been occational partners on particular projects.

This type of partnership is essential in development projects; experience has shown that the bilateral cooperation is an essential means for the management of investments.

For the development programme for South Lebanon, it is necessary to approach interested states, as follows:

- In the Arab World: the countries of the Gulf, have experience in cooperation, including Saudi Arabia. Kuwait, and the Emirates, but contacts with the other states of the region, such as Bahrain, Qatar, and Oman should also be considered:
- In Europe: France is in the center of Europe,

the privileged partner of Lebanon, but it is suitable to appeal to reinforcement of partnership with Germany, Italy, Spain, Switzerland, Belgium, and to open new partnerships with England or with the states of Northern Europe such as Norway, Sweden or Denmark:

- Elsewhere in the world: the United States of America seems to hope to develop a more supported cooperation with Lebanon. Australia or Japan can also be close, notwithstanding the fact that their privileged zone of intervention is the Pacific and the South-East Asian regions.

### E2.1.2. Multilateral cooperation partners, other than the United Nations

Here too, Lebanon benefits from the active partnership with many organizations of multilateral cooperation, on which Lebanon can hope to count for its development programme for South Lebanon. These are, in particular:

- The European Banks (essentially DGBB and the European Investment Bank);
- The Arab Fund for Socio-economic Development (based in Kuwait);
- The Islamic Bank of Development (based in Saudi Arabia);
- The International Development Funds of the OPEC.

Lebanon can enlarge this circle of partners, knowing that it will be essentially concentrated on commercial partners (certain organizations grant donations).

### E2.1.3. Partnership with the United Nations organizations

The United Nations agencies are strongly involved in the matter of South Lebanon through their peace keeping forces (UNIFIL) deployed in this region 21 years ago.

These agencies have also developed various actions of cooperation in Lebanon, in the frame-

work of its reconstruction, appealing to the competencies of a large number of relief organizations and agencies, in particular:

- The United Nations Development Programme (UNDP)
- The World Bank (WB)
- UNICEF
- The World Health Organization (WHO)
- Global Environment Foundation (GEF)
- Food and Agriculture Organization (FAO)
- International Funds for the Agricultural Development (IFAD)
- UNESCO

The development programme for South Lebanon has already benefited from the support of the United Nations, the UNDP has supported the different phases of finalizing this programme as well as the experimentation, in 1997 and 1998, of executing micro-projects in the region of Tyre and the launching of the study which has resulted in the present report.

It is, here too, probable that Lebanon can yet count on the partnership of the United Nations for the development of the South.

## E2.2. Other partners E2.2.1. Partnerships with international non-governmental organizations

Lebanon profits from an exceptionally wide network of international NGOs, with their multiple interventions in the country during the civil war of 1975-1990 as well as during the first years of reconstruction.

Certain NGOs conduct ambitious programmes of many hundred millions of dollars, financed through their own channels: in addition to the ICRC, Lebanon primarily depends on NGOs from religious movements (Catholic Relief Services, Evangelical Center of Development, the Middle East Council of Churches, etc), or powerful NGOs originating from Anglo-Saxons countries (OXFAM, Save the Children, World Vision, Care International, etc).

Others have less costly, but not less ambitious and motivating, programmes in all sectors.

Tying specific partnerships for the development of South Lebanon is posed, for the Lebanese Government, less in terms of establishing contacts, than in a selection of those NGOs whose actions best correspond to the context and the nature of the tasks foreseen in the programme.

Particular attention should be paid to the NGOs acting in the domains of:

- agricultural development;
- professional training and the human resources;
- social integration of the handicapped;
- childhood development;
- preservation of the environment.

# E2.2.2. The partnerships with the local non-governmental organizations

Local NGOs will be of essential importance for the execution of the development programme of South Lebanon. These who are already active prove, every day, their commitment and efficiency. Among them:

- The Amel Association;
- -The Lebanese Handicapped Association;
- The humanitarian institution Sadr;
- The Lebanese Social Movement;
- Caritas Lebanon'
- Jihad el-Binaa;
- The Lebanese Popular Aid;
- Hariri Foundation.

### E2.2.3. The support of the Diaspora

In the framework of resource mobilization, particular attention should be paid to the Lebanese Diaspora, especially those originating from the cities and villages of South Lebanon.

The Lebanese Diaspora is strong with many millions of citizens, many of whom emigrated a long time ago. The most numerous (more than one million per country) are the earliest settled communities, like in Brazil, Argentina, or in the United States. Australia, Columbia, and Canada with many hundred thousands of inhabitants of Lebanese origin. It is the same for the Gulf countries, among which Saudi Arabia counts a Lebanese community of 150,000 persons.

The emigrants originating from South Lebanon have a strong presence in Africa, especially in the Ivory Coast, Senegal and Nigeria. They are also present in many other countries.

It will less an issue of collecting funds from these communities (appeals are already made regularly), than of increasing the awareness of those members who have the capacity of investing in productive projects of South Lebanon, or those willing to sponsor projects of general interest in their cities or villages.

A similar approach should be carried out in favor of the Lebanese resident population, especially on the occasion of the Israeli withdrawal.

# E2.3. The headlines of a resource mobilization campaign

Resource mobilization and the search for partners for this programme should be carried out in the framework of a carefully prepared campaign. The resources to be found are financial, human, in kind, and in services.

This campaign should be simultaneously oriented in three directions: the search for resources for the public activities foreseen to the programme, the mobilization of private investments for the creation and development of enterprises, and the constitution of a network of operational partners in the field.

## E2.3.1. The search of resources for public activities

Let us recall that this programme represents an annual public cost of US\$100 million in Phase 1 (duration of reference three years) and US\$150 million in Phase 2 (duration of reference five years).

Theoretically supposing that the indicated reference duration are proved correct or are cumulative (reasonable hypothesis in the perspective of the programme), the programme will need, for the coming eight years, in absolute numbers, about US\$1.09 billion corresponding to the following parts:

- Socio-economic development US\$155 million:
- Infrastructures and services US\$645 million (of which US\$143 million is already assured for the current sites of work highway of the South, drainage and water);
- Assistance: US\$247 million (of which US\$154 million ise under the responsibility of the Tobacco Administration and US\$93 million is under the responsibility of the Council for the South).
- Mine clearance: US\$20.5 million.

By putting aside the part on "assistance" which is not under the responsibility of the programme, the budget provided for investment will be reduced to (US\$1.09-US\$247=) US\$843 million over eight years.

This number represents about 10% of the Lebanese State investment funds on the national scale (for a region that counts 10% of the population of the country). It is, therefore, a level of average engagement which should permit the state to take into consideration without major difficulty and to register the correspondent funds in a multi-yearly plan. Still, this does not mean that the funds will be available, considering the difficult financial sit-

uation of Lebanon. Therefore, it is necessary to actively identify sources other than the international financial donors.

This search for external means is much more important than certain projects, such as that of the South irrigation by Conveyor 800 for the irrigation or the implementation of the highway programme in the South, which will stretch over a time period exceeding the eight years already mentioned.

Lebanon will be able to valorize, besides the financial donors, all the stakes related to the availability of these funds in order to block underdevelopment and to normalize the political and socio-economic situation of this sensitive region, and to assure its security and that of the civil population. Ì

The contact with financial donors should depend on three documents:

- A list presenting the stakes of the development programme (the present report can be used as a base);
- A group of project records to be financed (written using the elements of this report);
- A clear presentation of the modalities of execution, guarantees of transparency and association of the financial donors for follow-up.

As was previously indicated, it is recommended to isolate the financing of the "socio-economic development" part within a fund managed in the framework of a partnership between the CDR and the donors, among which funds can pass through the UNDP channel. It is also recommended to treat in the same way, according to the appropriate channels (the CDR and ministries), the funds granted to infrastructure and equipment work and mine clearance.

The approach of the financial donors should be the subject of awareness meetings followed by bilateral discussions. The constitution of a financial donors committee to become partners in the programme. A team from the CDR should be assigned to this approach.

While waiting for the stepsto be taken with the financial donors to succeed, the Lebanese State should find the first resources allowing the efficient initiation of the programme.

## E2.3.2. The mobilization of private investments

The programme foresees specific funds leading the actions of mobilization of private investors. It is, however, important since the initiation of the programme, and without waiting for the availability of public financing, to raise the awareness of the investors of the stakes and opportunities that characterize South Lebanon.

This step will not completely bear fruit until Phase 2, once the withdrawal is accomplished. But when we realize the time passing between investment decisions and the actual realization of these investments, it is clear that we should prepare the investments of tomorrow. Interesting investments can, in fact, be prepared, especially in the domains of tourism, the food industry, and cultural projects.

Also, while waiting for the constitution of the operational team for the entire programme, it is important to compose a small team of agents from IDAL, reinforced by agents from the CDR, to undertake the first steps towards approaching the investors.

These steps should depend on three types of documents:

- Presentation supporting the region, its advantages, and the opportunities it offers;
- Records describing projects that are to be realized for possible investment;

- A listing of guaranties and advantages given to the investors.

With these supports, this team should define a differentiated method of approach in the direction of the local investors, investors of the Diaspora, and foreign investors. When needed, this will encourage the sponsoring of prominent personalities of the state of meetings or specific manifestations in Lebanon or abroad.

### E2.3.3. The constitution of a network of operational partners

As soon as the first funds are assured for the "socio-economical development" part of the programme, it will be necessary to constitute, around the operational team established on the field, a network of partners (NGOs, municipalities, cooperatives, Chambers of Commerce, banks, etc.) capable of participating as operators in the execution of the programme.

The approach of these partners can be based on a project. The same, for the execution of a specific action, the operational team will contact the organizations that are susceptible to help defuse the information and to realize the projected activities. It will select those among them presenting the best guaranties.

In term of four to five actions launched, the operational team will proceed to approaches of collective mobilization, in order to mobilize and motivate the network of partners constituted this way. This mobilization will permit to multiply the engaged means, while informing the operational team of suitable adjustments to be brought to the undertaken actions.

### E3. Follow-up and evaluation of the development programme

Placing a mechanism for permanent follow-up and evaluation is an important conditionourf the success of the development programme.

The operational team to be put in place by the CDR to implement the activities of socio-economic development on the field and to follow up the implementation of other actions should:

- keep a logbook to register the events of the day, economic, political, and social. This document should be examined periodically to appreciate the intervening changes in the economic and social life in South Lebanon;
- keep a logbook of launched and realized operations, with dates, costs, and operators, to provide detailed assessment of every led action. The operations to be detailed are those which are registered within the framework of the programme, whoever the initiators are.
- do a periodical and final evaluation of each project to guage the satisfaction of the beneficiary, the financial contributor, and the executors:
- do a continuous follow-up of statistical indicators, among which some are to be constituted or actualized, and to measure the development gaps still existing between South Lebanon and the rest of the country.

These indicators will also be about demography (in particular the change in number and age group of he inhabitants), economic conditions (revenues, unemployment, rate of activity per gender, etc.), social conditions, (illiteracy, school attendance, etc.), enterprises, agriculture, displacement, etc.

- set up a database on cities and villages of the South, regrouping all the available information on each of the localities, to tailor-make the action on the field and to better balance the actions among the different parts of the region. From the information gathered in this manner, a progress report of the development programme should be published each year, citing

the launched and accomplished activities as well as the realized expenses, and presenting an objective analysis of the observed socio-economic changes.

This yearly assessment should be presented to the political authorities responsible for the programme, as well to the financial donors. It should be debated in order to confirm the current orientations or to proceed in adjustments of the programme.

# E. THE EXECUTION OF THE REGIONAL DEVELOPMENT PROGRAMME

## E1. The institutional arrangements

### **TABLES**

Page	No.	Title			
7	Ħ.	Estimated costs of public	110	700	and the second of the second of the second
		investments and suggested assistance (in US\$ 1999)	110	T28.	Synthesis table of suggested assistance for the rehabilitation of human resources
12	T2.	Occupied villages and the border zone	114	<b>T</b> 29.	Synthesis table of suggested assistance for rehabilitation
14	T3.	Resident population per caza in 1996	117	127.	of the administrative staff
15	T4.	Estimated resident and registered population in the five cazas in	117	T30.	Synthesis table of suggested actions for the mobilization
		1997: and extrapolation based on the number of voters and students			of means and for the promotion
18	<b>T</b> 5.	Some demographic and social indicators	129	T31.	Integrated development programme for South Lebanon:
21	T6.	Damaged houses in the five cazas in 1996			Indicative budget for Phase 1 - conflict persistence.
21	17.	Housing conditions	100	T20	Reference duration: 3 years
30	T8.	Figures of the ground occupation based on	132 133	T32. T33.	Specific programme for the withdrawal period
		Satellite Spot images, July 1997-	133	133.	Integrated development programme of South Lebanon for Phase 2: consolidation of the post-conflict situation
		area expressed in hectares			Reference duration: 5 years
37 27	T9.	The origin of irrigation water per sector			noisranta daranta a pagis
<b>3</b> 7	T10.	Irrigated, dry and heterogeneous cultivated areas per caza in 1997, in hectares			•
39	T11.	Cultivation of tobacco in the occupied zone in 1977			
٠,	111.	Area /number of producers/production/net income			
40	112.	Profits and added values of some agricultural products in 1997-1998			
43	113.	Distribution of industrial enterprises per caza and nature of activity	MAPS		
		in South Lebanon (with the exclusion of the extraction industries)			
44	114.	Distribution of services and commercial enterprises per caza	Page	No.	Title
40	T1.0	in the mohafazat of the South and of Nabatiyeh	10	FI.	Poverty in Lebanon
48	T15.	The principal indicators of health equipment in the two mohafazats of South Lebanon	13	F2.	Occupied zone, UNIFIL area of deployment and the perimeter
49	T16.	Distribution of schools per caza, zone and status			of the development programme
49	117.	Surface areas and general state of school premises	14	F3.	Resident population per caza in 1996
49	T18.	Distribution of pupils per caza, zone, and level	23	F4.	The Near East
53	T19.	Demographic projections for 10 years (assumption end			
		of conflict at the beginning of year 1) in the 5 cazas	24	F5.	Hydrography of South Lebanon
54	T20.	Job creation levels during the post-conflict period	26	F6.	Urban frame and functional solidarity
57	T21.	Decree 14522 of May 16, 1970: Water allowances in the	28	F7.	Impact of conflict on territory
		central regions of Lebanon, located between Nahr Beirut and the southern frontier	31	F8.	Tyes of ground occupation (simplified legend)
78	<b>T22</b> .	Support actions to industrial and tertiary enterprises	38	F9.	Agricultural territory in 1997
. •		under the development programme	45	F10.	Existing road network
80	T23.	The establishment of mountainous lakes in South Lebanon:	46	FII.	Electrical network of Lebanon
		cost of projects	65	F12.	Tourism patential of South Lebanon
87	124.	Synthesis table of the proposed assistance in the	66	F13.	The major historical and cultural sites of
00	TOF	agricultural sector under the development programme			the Middle East
92	T25.	Synthesis of suggested assistance for the rehabilitation of the environment, the sites, and the environment to life	79	F14.	Irrigation projects in South Lebanon
		from the development programme	93	F15.	Principals of development and valorizing the resources
100	T26.	Suggested projects in the road domain			• •
105	127.	Synthesis table for suggested assistance for the reconstruction and	99	FT6.	Principal center lines to be developed
		development of the infrastructure and equipment			

The formulation of the present report was guided by General Yehya Raad, Secretary General of the High Relief Committee. in his capacity as National Programme Coordinator of the joint programme between the Lebanese government and the UNDP for "Post-Conflict Socio-Economic Rehabilitation for South Lebanon". General Raad was assisted, in his mission, by a principal advisor for the programme, Dr. Sati' Arnaout. The UNDP was represented in this programme by its Deputy Resident Representative in Beirut, Mr. Rachid Ayadi.

### THE PROJECT TEAM

The realization of the present work involved five organizations known for the quality of their work and their competency:

The Institute of Urban Planning of the Region of Ilede-France (IAURIF)
Regional agency for urban development based in Paris.

#### **TEAM INTERNATIONAL**

Architectural office based in Beirut, specializing in infrastructure and urban management studies.

Consultation and Research Institute (CRI)
Institute specializing in economic and social issues, as well as statistical studies, based in Beirut.

#### **ECODIT**

Based in Washington, this office specializes in studies of environment, natural resource management, and the impact of pollution.

Post-war Reconstruction and Development Unit Research department based at the University of York in Great Britain, specializing in the observation of experiences concerning post-war physical, economic, and social reconstruction around the world.

In total, these organizations have mobilized more than 40 highly qualified experts during the last 10 months in order to realize this report, with the active consent and the supervision of the High Relief Committee team and the UNDP, and with the support of many high officials of the Lebanese administration, especially in the CDR, the Litani Office, and the Ministries of Agriculture, Environment, and Tourism, and in coordination with many municipal teams, in particular those of Tyre, Nabatiyeh, and Saida.

#### The project team included:

Dr. Fouad Awada Architect DESA, Doctor in Urban Development ENPC General Co-Director of the IDURIF Director of Project

> Dr. Youssef Salam Doctor in Civil Engineering, Partner TEAM International Co-Director of Project

Dr. Kamal Hamdan Doctor in Economy Consultation and Research Institute (CRI)

> Joseph Karam X, Ponts, MIT MSc, Technology and Policy President of ECODIT

Dr. Sultan Barakat PhD. Architecture. MA Urban Conservation Director of PRDU

Advisors having participated in the project:

•Eric Huybrechts,
Architect, Urbanist, principal counselor of the Project
•Ali Bazzi, Doctor in Anthropology
•Xavier de Buyer, Engineer of the GREF
•Youssef Fawaz, Doctor in Engineering
•Yan Giron, Agricultural Engineer Specialist
Halieutical - Cofrepeche
•Ziad Hajjar, Hydraulic Engineer
•Mounzer Jaber, Doctor in History
•Tarek Majzoub, Doctor in International Law
•Saadeddine Mudallal, Civil Engineer
•Hussein Rammal, Doctor in Agriculture
Doctor in the Economy of Development
•Laure Watteau, BA Geography

#### Secretariat of the project

•Zaki Naccache Architect, MA Social Science TEAM INTERNATIONAL

#### Expert members of the team

- Dunia Andari, BA International Affairs, TEAM
- •Kamal Bekdash, Doctor in Psychology, TEAM
- •Hind Beydoun, MA Public Health, CRI
- •Kawthar Dara, Economist and Computer Analyst, CRI
- Ian Davis, Architect, RIBA, FRGS, PhS, PRDU
- Rania Darwish, BA Economy and MBA Management, CRI
- Suzy Devoize, Economist, IAURIF
- Dalia Fathallah, DEA, Hum. Sc. TEAM
- · Lama Jebara, MA Management, TEAM
- · Hussein Haidar, MA Civil Engineer
- Reda Hamdan, Economist and Statistician, CRI
- Michel Hermelin, Engineer of Transport, IAURIF
- · Hassan Kassir, Doctor in Sociology and Economist
- Dalia Khalil, MA European Affairs, CRI
- Rula Mikdashi, BSc Trade, TEAM
- Hassan Miskawi, Civil Engineer, TEAM
- · David Mulla, Agricultural Engineer, ECODIT
- Tammam Nakash, Civil Engineer and Transports, TEAM
- Tarif Oueini, Electrical Engineer, TEAM
- •Alpaslan Ozerdem, MSc Civil Engineer, Architect, PRDU
- Jean-Louis Pages, Architect DPLG, Urbanist DIUP, IAURIF
- Mohamad Shuman, B.Sc. Management. TEAM
- Christian Thibault, Agricultural and Horticultural Engineer, IAURIF
- Jamal Zarif, Civil Engineer and MBA, TEAM

### CONTRIBUTING INSTITUTIONS:

- The services of the Prime Minister
- Ministry of Social Affairs
- Ministry of Economy
- · Ministry of Agriculture
- \* Ministry of Environment
- Ministry of Hydraulic and Electrical Resources
- . Ministry of Rural and Municipal Affairs
- · Ministry of Transport

- Council for Development and Reconstruction
   Council for the South
  - Executive Council for Large Projects
- Central Bank of Lebanon
   Investment and Development Agency (IDAL)
  - The National Office of Litani
  - The Water Office of Jabal Amel
    - The Water Office of Tyre
      - The Green Plan
- · The Research and Documentation Center of Saida
  - The Lebanese-American University of Saida
    - The Center of Studies and Research on Contemporary Near East
      - The CREAL
      - The Municipality of Saida
      - The Municipality of Tyre
      - The Municipality of Nabatiyeh
- The Chamber of Trade and Industry of the South
  - The Fishermen's Union of Tyre and Sarafand
- Various agricultural cooperatives of South Lebanon
  - The World Bank
  - The Services of the UNO, Beirut
    - UNIFIL
    - ESCWA
    - The Embassy of French
      - The Embassy of Italy
        - USAID/Lebanon
  - International Committee of the Red Cross
    - The Institutions of Moussa Sadr
      - Al-Maimoua
      - Mouvement Social Libanais
    - ICOMOS (Monuments and Sites)
      - Mercy Corps International
        - Jihad El-Binaa