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

## PROJECT DOCUMENT

### BAALBECK HERMEL HEALTH SECTOR

### REVIEW AND PLAN OF ACTION

## I. BACKGROUND

### I. DEMOGRAPHIC, GEOGRAPHIC, AND ECONOMIC BACKGROUND

#### I.1. GEOGRAPHIC AND MAIN POPULATION CHARACTERISTICS:

The two Qadas of Baalbeck and Hermel cover a total area of approximately 2,640km<sup>2</sup>, which constitutes approximately 26% of the total area of Lebanon. The area is estimated to have between 220-230 towns, villages, and human settlement areas. The exact number of human settlements remains imprecise due to two factors: seasonal population movements and the small size of some settlements (sometimes 3-4 housing units belonging to members of the same family).

The total population has recently been estimated to be 250,000 persons, 225,000 of which reside in the Qada of Baalbeck, while 25,000 reside in the Qada of Hermel (Administration Centrale de la Statistique - ACS-, 1997). Another national-scale survey has estimated the total population at around 190,000 persons with around 152,000 persons residing in Baalbeck and 38,000 residing in Hermel (Population & Housing Survey, 1996). The ACS survey has estimated the average family size to be 5.2 persons, with an average of 3.13 children. 16.6% of households were found to constitute more than 8 members.

Geographically, the area is large and settlements are dispersed. The Jurd areas are rough in terms of both climate and terrain. The road network has improved in the last few years but some villages remain without proper access roads. There is no public transport system in the area, and residents rely on privately owned cars and a very limited number of "taxis", operating mainly within the larger towns and along the main roads. The telephone network has only recently been repaired and rehabilitated, after an almost total breakdown lasting more than 15 years.

The mainly rural areas of Baalbeck and Hermel have historically suffered from marginalization and under-development, apparent in the unbalanced development of these areas in comparison with other areas of Lebanon. As such, the areas of Baalbeck and Hermel, suffer from the inadequate supply and distribution of infrastructural services such water, sanitation, housing, health care, and education. The 1997 ACS survey found that 53.1% of households were not connected to public water supplies and that 33.5% depended on well-water. More alarming was the finding that 82.6% of households were not connected to a sewage network.

Economically the areas of Baalbeck and Hermel suffer from an almost total reliance on low-return agriculture, especially since the enforcement, in 1991, of the total ban on the growing of illicit crops which used be the main cash crop and a source of high income for many residents of the area. At present, the majority of employment is provided by the agricultural sector and the armed forces. A recent UNDP study (1998) has estimated that

58% of households (and 65% of the population) fall under the poverty line. It has been further estimated that around 50% of the population control approximately 20% of total income, while 10% control in excess of 30% of total income.

School enrollment was found by the ACS survey to have risen over the years to reach 95.4% of those between the ages of 5 and 9 years, dropping to 89.6% for males and 94% for females for those between 10 and 14 years, and to 60.9% for males and 64.3% for females for those aged between 15 and 19 years.

The deficiencies in the health delivery system are especially glaring. Apart from a few dispensaries and health centers, services are mainly concentrated in the private sector, whose services are often too expensive for the population. An IRDP report has estimated that 72% of Baalbeck villages and 97% of Hermel villages are without a health care center or dispensary. The 1998 UNDP Poverty Report, has shown that the poor in the region utilize the services of dispensaries and health centers operated by non-governmental organizations to a larger extent than the non-poor- around 77% of the poor as compared to 66% of the non-poor. NGO health care facilities are, therefore, to be viewed as providing a safety net for the poorer residents of Baalbeck and Hermel, allowing them access to primary health care which would otherwise be unaffordable.

Hermel has only one government hospital which despite IRDP support in terms of rehabilitation and equipping remains largely non-functional. Another government hospital is located in Baalbeck. This hospital is included under a Ministry of Public Health scheme for rehabilitation funded through a loan from the World Bank. At present, however, it functions largely as outpatient clinics, while in-patient services remain largely unused. Hospitalization in both areas is heavily reliant on private hospitals, often under MoPH coverage. Fees to be paid by users, however, remain high. The ACS has estimated that 7.1% of family expenditures is spent on health care, while 12.7% of families reported that they had had to borrow money in order to finance health care costs. The UNDP 1998 Poverty Report estimated that access to hospitals is higher for Baalbeck residents (51.2% of households) as compared to Hermel residents (19.3%). The same study reported that a higher proportion of the non-poor (84%) utilized private hospitalization services as compared with the poor (61%). Households in Baalbeck and Hermel were found to spend 6% of their total family expenditure on health, rising to 19.9% among the poorest families with the lowest overall family expenditures (<300,000LL/month).

A recent UNDP report (Poverty and Gender Profile in the Baalbeck-Hermel Region, 1998) concluded that "only 53% of households in Baalbeck and Hermel have access to health centers and dispensaries. Around 72% of these health centers are operated by non-governmental organizations, and only 9.8% are operated by the public sector. Around 54% of households do not have access to hospitals in the region. The highest proportion of available hospitals are privately owned (74%). Access to hospitals is higher for the residents of Baalbeck as compared to families in Hermel".

Health care workers that exist and are working in the area are insufficient in terms of both quantity and quality, and appear to require re-training. The deficiencies in numbers is characteristics more of nursing and other para-medical staff than it is of physicians.

#### 1.2. LOCAL COMMUNITY STRUCTURES:

Through the IRDP a system of local committees has been set up such that each village or settlement has designated one representatives (around 230 persons), while the total area has been divided into 22 local areas, each served by a committee whose membership are the representatives of all the villages within the catchment area. A Higher Local Committee has also been formed whose membership is made up of one representative from each of the 22 local committees. The original mandate of the Committees was to recommend and oversee the disbursements of micro-loans, but this role has been expanded to include assessment and prioritization of social activities, including health care. In the fall of 1995, the 22 Committees were consulted as to prioritizing health care problems and proposing sites for the establishment of the then proposed new health centers.

## 2. JUSTIFICATION FOR UNDCP/ UNDP INTERVENTION:

The first phase of the IRDP for Baalbeck and Hermel was completed at the end of 1995. Cited among the achievements of Phase I of the project was the "full rehabilitation and equipment of El-Hermel hospital". Other achievements in the health sector were not possible during Phase I, and health sector interventions have been accorded a higher profile within Phase II. Support of health-activities within Phase II are expected to "consolidate activities began in Phase I".

The national program for Baalbeck and Hermel is composed of two complimentary sub-programs:

1. A public investment and infrastructure sub-program, and
2. A social and economic development sub-program.

The rationale for involvement in health services is based on the following:

1. The survey conducted prior to Phase I showed that health services came out as the second most important need in the Baalbeck-Hermel area. In 1993, studies showed the complete absence of health education and Primary Health Care.
2. The great majority of villages in the area have no access to medical institutions such as dispensaries and hospitals. Lack of transport facilities makes it very difficult for these people to have access to health centers and health services that are available in Baalbeck and Hermel's larger towns.
3. The main reason for dissatisfaction with medical services in the area are the absence of qualified doctors, their scarcity and superficiality of medical care available.
4. Although a number of NGOs in the area provide health services, most of their services are inadequate. Moreover, the majority of the professionals of these NGO dispensaries are not professionally trained. Both hospitals and dispensaries are in bad need of trained personnel and modern equipment.

UNDCP involvement comes within the scope of the second sub-program (Social and Economic Development Sub-program: SPDES), which has among its stated aims the improvement of basic social services. Phase II of the project has as a stated aim "the improvement of the infrastructure, social and health services within the area, such that better conditions for sustainable development are created". Support of Primary Health Care and the strengthening of Health District Management are two of the main components that UNDCP has identified for intervention. A total of USD 535,000 has been allocated for activities falling within these two components to be implemented during the course of Phase II of the IRDP.

Originally, the input of UNDCP was based on the following:

1. The rehabilitation and equipping of 7 health centers and 15 dispensaries in the area.
2. The provision of training to nurses, (30) assistant nurses, and (30) PHC workers, incorporating drug awareness training to ensure that health care personnel are able to deal with immediate drug abuse related needs.

3. The promotion of the capacities of the district health management teams in the two Qadas to administer and manage health services in the area.

The Lebanese Government, through both the Council for Development and Reconstruction and the Ministry of Public Health, is expected to provide cost-sharing to cover the implementation costs for some components, and is expected to provide the personnel and premises for public health centers. Additional reliance will be put on some specialized UN agencies (WHO), and some UN funding agencies (Unicef, and UNFPA) for support in terms of technical assistance and training in terms of health related activities.

Since the time of writing of the original Phase II project plan, a number of changes have taken place which prompted the Health Sub-Committee\* to seek an alternative project plan and Project Document to benefit from the support and funding of UNDP, UNDCP, and other interested agencies. A major development was the completion of building and equipping of four new Ministry of Public Health PHC Centers in the area, relieving the pressure to rehabilitate additional premises and buy equipment. Another, was the social upheavals being called for by certain community leaders in an effort to raise awareness of the prevailing conditions of poverty and poor social services in the area.

It was, hence, decided to undertake a critical review of the health project plan in order to on the one hand, incorporate the new Centers and their running into the plan, and on the other, to design a comprehensive future-looking health plan and program of action for Baalbeck and Hermel based on a proper assessment of health needs and problems and on available human and material resources.

#### THE NEW HEALTH CENTERS:

In late Summer of 1997 the Kuwaiti Fund for Development handed over a number of built and fully equipped Primary Health Care Centers to the Lebanese Ministry of Public Health. Four of those Centers are located in the Qada of Baalbeck in the towns of: 'Irsal, Nabi Sheet, Deir el-Ahmar, and Shmistar. Each Center is assumed to serve a catchment of population of between 25-30,000 persons, the national standard set by the Ministry of Public Health and WHO in 1993.

The four Centers have, however, remained unused due to the inability of the Ministry of Public Health to provide the necessary manpower and supplies to run them. This is in large part the result of the complex bureaucratic procedures that need to be followed, and which promise to delay the opening of these Centers indefinitely.

The four Centers serve the communities also served by the Integrated Rural Development Project of Baalbeck-Hermel (UNDP/ UNDCP) which has as one of its main components the improvement of health status of the population and the strengthening of health care

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\* Membership of the sub-committee are representatives of the following: UNDP (IRDP), CDR, MoPH, MoSA, Unicef, WHO, UNFPA, NGOs as and when necessary.

services in the area. As such a suggestion has arisen to formulate an agreement between the Ministry of Public Health and the IRDP whereby the IRDP assures the functioning of the centers, under the Ministry's supervision and with joint funding. The Ministry of Public Health has made an official request to the Director of the IRDP in Baalbeck and Hermel for assistance in staffing the 4 new model health centers. The Ministry has already expressed a commitment to providing the needed drug supplies for the Centers. The Ministry has further suggested that the IRDP recruit and employ the staff needed to run the Centers until such time that bureaucratic procedures allow the Ministry to take on the staff within its cadre of personnel.

A separate Project Document for the running of the four new health centers as well as the running of Hermel Rural Hospital, and the Primary Health Care Center at Baalbeck Hospital with the involvement and support of the IRDP, the MoPH, and CDR has already been prepared, and sent for approval by the Ministry of Public Health and the Ministry of Finance. The Project Document in question appears as Annex 1 at the end of this document.

#### PUBLIC HOSPITALS

While there are several problems with the hospitalization sector in the area of Baalbeck and Hermel in terms of quantity, distribution, and quality, it is beyond the scope of this Project to address these problems except in a cursory manner and as they affect the implementation of PHC programs.

One of the main problems associated with hospitalization in Baalbeck and Hermel is that the overwhelming reliance on the private sector has meant a virtual absence of a functional referral system between Health Centers and Hospitals. The role of a referral center ought to be played by the two public hospitals in Baalbeck and Hermel, but both have been weakened by years of neglect and a weakened Ministry. This document includes a component of minimal support for Hermel Rural Hospital within the scope of PHC strengthening. It is not, however, possible to address the problems of Baalbeck Hospital within the constraints of this Project.

At this time, the hospitalization sector at the national level is undergoing a number of important changes, not least of which the adoption of the Law of Autonomy of Public Hospitals, which was recently passed by Parliament and awaits the issuing of decrees for implementation. The new law in essence gives each hospital's governing board total autonomy in hiring and firing and in day to day administrative and financial management within the boundaries of national policy. Baalbeck Public Hospitals is one of the pilot sites chosen for the implementation of the Law of Autonomy of Public Hospitals.

It is also worth noting here that Baalbeck Public Hospital is one of 7 Ministry of Public Health hospitals included in the World Bank-funded project for rehabilitation and reform. A comprehensive study of the status and needs of the hospital has already been carried out, and a detailed plan for the hospital and its services has been drafted. At the time of

writing this report, the Ministry of Public Health is in the process of selecting an engineering firm to carry out necessary structural rehabilitation.

Once these two processes are underway, it is hoped that Baalbeck Hospital would receive the boost it needs to become an efficient low-cost hospital and referral center for the entire area.



### 3. HEALTH SECTOR PROBLEMS IN THE QADAS OF BAALBECK AND HERMEL

#### 3.1. SOURCES OF INFORMATION:

The lack of information on health status and health needs in the areas of Baalbeck and Hermel, for use in proper planning of health care and health services is a major problem. While it is widely recognized that the population of the area is impoverished and suffers from infectious and communicable diseases resulting from unhealthy and unsanitary living conditions, there has been virtually no documentation of health status in the area. There have been no studies or surveys carried out in the areas of Baalbeck and Hermel with the express purpose of determining health problems and identifying health needs and priority areas for action.

At the present time, the option of carrying out such health needs assessment surveys is not a viable one. An assessment of the health needs in the area will, therefore, have to rely on the critical use of other available sources. These include national scale surveys, area-specific studies dealing with particular issues, and the use of studies of health needs that have been carried out elsewhere in the Beqa'a. A number of such "background" documents and information is available. Some of those are:

- "Conditions de Vie des Menages en 1997", ACS
- The Population and Housing Survey 1996
- The PAPChild Survey 1996
- "Conditions de Vie des menages dans la region de Baalbeck-Hermel en 1997", ACS
- "Poverty and Gender profile in the Baalbeck-Hermel Region", UNDP/ IRDP 1998
- The "National Carte Sanitaire", for which data is currently being collected, but is as yet unavailable.
- AUB survey of health conditions in 5 Beqa'a Villages, 1997
- School Health Program records of "Secours Populaire Libanais", 1995-96
- Data sheet of Red Cross Health Center (Hermel), 1995
- "Maternal and Child Health Survey in Hermel", 1988, LFPA
- AUB Comparative Health Survey, of 'Akkar, Hermel, and Tyre, 1994
- Abstracts and preliminary results of a series of research projects on Reproductive Health and Childbirth. AUB, 1998

A number of other techniques have also been employed in determining health needs including:

- A review of some Health Records kept at Health Centers, though those for the most part were not in a form segregated enough to be useful.
- Focused discussions and interviews with physicians practicing in the area, especially General Practitioners, Pediatricians and Obstetricians, for their "expert opinion" on the major health problems and issues.
- Focused discussions and interviews with selected representatives of the Local Committees, for their opinion and perceptions of priority health problems in the area

and for their opinion on ways of resolving outstanding issues such as staffing of Centers.

- Two short questionnaires that have been distributed among existing Health Centers to collect information on the basic services and equipment on offer at these Centers and on the skills and training of nursing staff.
- Interviews and discussions with IRDP personnel.
- Interviews with IRDP Health Sub-Committee members
- Interviews with others involved in various national programs

### 3.2. COMMON HEALTH PROBLEMS AND DISEASES:

From a review of the above sources, a number of health and diseases problems have emerged as significant in the area. Other problems related to the overall Health Care Delivery System will be discussed in Section IV below.

There is almost universal agreement among physicians interviewed that Typhoid and Brucellosis were major health hazards in Baalbeck and Hermel. Both of which conditions are the result of poor environmental conditions and poor regulation. Water-borne diseases were cited in general as major health problems in the area. Lack of access to *safe* potable water was implicated as the cause of most preventable illnesses among children and adults. In addition, in the Hermel region, renal problems were cited, affecting even very young children, and also presumed a direct result of the drinking water supplies in the area, believed to be very high in calcium.

Among adults, high blood pressure and cardiovascular diseases were cited as most prevalent among the population by physicians in both Baalbeck in Hermel. There seemed to be agreement among physicians that the incidence of these diseases was on the rise.

Data available from the records of the School Health Program of the "Secours Populaire Libanais" for the academic year 1995-1996, and based on physical examinations carried out on 18,333 school children in the Beqa'a present the following picture:

Of the total children examined 41% were suffering from some health problems. A significant number of children were suffering from more than one problem. Of those health problems discovered, 66.7% required referral to a Specialist. The most common health problems were found to be dental, affecting 23.5% of children. Laryngeal problems affected 7.52, ear problems affected 3.93%, Dermatological problems affected 3.38%, and eye problems affected 2.25%. The rest suffered from a range of problems including pulmonary illnesses, GI problems, nervous system problems, and cardiovascular problems.

An AUB survey of five Beqa'a villages (1997) reported that 15% of children under 12 years of age had never received any vaccination, while 20.6% had received vaccination only during National Immunization Campaign days (Polio vaccine).

Another AUB survey carried out in 1994 among farmers in Hermel found that 25.6% reported suffering from "cold", 12.8% from "cancer", 9.4% from "gastroenteritis", 6.8% from "heart problems", 6.8% from "fever", 6% from "infections", 4.3% from "anxiety", 2.6% from "kidney problems", 1.7% from "cholera", and 1.7% from "tuberculosis".

15.2% reported an animal-related illness, of which 61.5% were suffering from Brucellosis, and 38.5% from rabies.

Of the same population 74.7% reported that all their children were vaccinated, while 4.2% reported that less than 20% of their children were vaccinated. Of those whose children were not vaccinated, 43.5% believed that vaccination "was not important".

On another hand, the impressions and "expert opinion" of physicians practicing in both Baalbeck and Hermel were collected. Most practitioners agreed that the majority of illnesses faced by the population were the direct result of poverty, poor environmental conditions, and lack of knowledge and health awareness. There appears to be general agreement that aggravating the existing problems is the fact that presentation at a health center is left until a late stage, when the diseases has become much worse. This, there is also general agreement, is due to deteriorating economic conditions coupled with lack of awareness. There is, however, some agreement that utilization of health services appears to be seasonal, increasing during harvest months and dwindling at other times of the year.

#### 3.2.1. ADULT & GENERAL HEALTH:

- High blood pressure was cited by almost all practitioners as a very common condition among adults.
- Cardio-vascular diseases is also thought to be prevalent amongst adults
- Diabetes is believed to be very common. One estimate put the incidence of Diabetes at affecting around 25-30% of the population.
- Tuberculosis is believed to be common in certain villages and areas. The following villages were cited as having population with high incidence of TB: Beit Medlej, Beit Yazbeck, Beit Shuaib, Yammouneh, Qasr, and Wadi Fa'ra.
- Arthritis is common.
- Allergies are extremely common.
- Renal problems are quite common in the Hermel area, thought to be due largely to the nature of the drinking water supplies in the area.
- Water-borne diseases and parasites are common.
- Accidents and injuries.
- Some problems with Iodine deficiency.

#### 3.2.2. CHILDREN'S HEALTH:

- There is agreement that children in the area suffer from "seasonal illnesses", that is ARI problems during the winter months and GI problems during the summer months.

- Tuberculosis, Typhoid, and Brucellosis are common and quite wide-spread in the area.
- Renal problems appear to also affect children in Hermel, even very young children.
- Water-borne diseases and parasites also affect children. Typhoid has been on the increase over the past ten years.
- Low immunization rates, high rate of incomplete immunization.
- Asthma is common among children.

### 3.3. EXISTING HEALTH SYSTEM:

#### Health District Management:

The Offices of the Qada Physician, within the structure of the Ministry of Public Health, in both Baalbeck and Hermel, are extremely weak. The Qada Physician for Hermel resides in Baalbeck and visits Hermel only occasionally. Only a handful of low-rank employees are attached to the Office in Hermel, with very few responsibilities. Relations between the Qada Physician and his staff are extremely strained and uncooperative. Relations between the Qada Physician and the Director of Hermel Hospital are also strained and almost non-existent.

The post of Qada Physician for Baalbeck had been vacant for a number of years, and management had been left to the Office of the Director of Health Services in the Beqa'a Mohafaza based in Zahle. Recently the responsibilities of health district management for Baalbeck have been assigned to the Qada Physician of Hermel as a temporary measure.

Both Offices are at present incapable of carrying out their responsibilities in terms of District health planning and management. This is due to the lack of personnel, to the poor training of existing personnel, to the lack of sufficient materials and equipment, and to a total reliance on the Central Administration in Beirut for provisions and funding.

The Ministry of Public Health will shortly have a PHC/ Reproductive Health Coordinator responsible for the follow-up and implementation of the National Reproductive Health Program based in the Beqa'a. The main tasks of this Coordinator will center on the areas of Baalbeck and Hermel.

Unicef, on the other hand has a Beqa'a Coordinator based in the area, whose main tasks are liaison and coordination with the Ministry of Social Affairs.

In terms of the present Project, the IRDP also has personnel working in the health sector. At present there is one Project Officer and one Administrative Assistant responsible for the follow-up of projects in the Health, Women, Environment, and Social Programs sectors. This load is too heavy to allow the proper strategic planning and projections, monitoring, evaluation and feedback required.

All these persons, and the institutions they represent, constitute the basis of a technical team capable of coordinating health related activities in Baalbeck and Hermel.

Perceived Priorities:

Physicians interviewed were in agreement that additional health services were not a priority, rather better regulation by the Government and improved public health and environmental measures were urgently required

1. Non-existent referral system
2. Non-functional public hospitals
3. Dominance of private sector hospitals
4. Health centers few and offer too little
5. New health centers still not functional
6. Lack of qualified personnel (especially nursing staff)
7. Very weak emergency transport and treatment system
8. Drugs unavailable
9. Reliance on medical advice and treatment by pharmacists.
10. Non-functional MoPH district management structure
11. Large area and dispersed population
12. Low incomes preventing patients from seeking medical attention until late stages
13. Over-supply of physicians plus low incomes have led to underemployment of physicians.
14. Actual health/ disease problems still not entirely clear: Water-borne and food-borne are high. TB problem in some areas, MoPH TB Center in Hermel is taking care of load. Some chronic diseases: cardiovascular.
15. Low levels of immunization (coverage) still reported by physicians.

Currently Existing Services:

- 40 H.C.s, mostly very small, and offering little
- 4 new H.C.s fully equipped (MoPH), as yet non-functional
- 1 recently equipped H.C. within Baalbeck hospital
- 1 small, public rural hospital in Hermel equipped but still functional as outpatient clinics
- 1 private hospital in Hermel, mainly maternity, but also undertaking small operations
- 1 public hospital in Baalbeck, under-utilized
- 8 private hospitals in the area of Baalbeck city
- 1 recently opened MoPH TB center in Hermel
- + an undetermined number of private clinics

A recent MoPH decision, has limited the numbers of beds under contract with private hospitals, following a failed attempt to decrease the total number of hospitals under contract with the Ministry.

A summary (one-page) check-list has been sent to the larger health centers operating in the area via IRDP staff to update the existing information on personnel and types of services and facilities available. The results of this quick survey appear in Annexes 3 and 4 at the end of this document.

The National Program for Reproductive Health has recently been formulated by the Ministries of Public Health and Social Affairs to be funded by UNFPA and to receive Technical Support from WHO. The Ministry of Public Health has recently signed an agreement for funding with UNFPA to upgrade, equip, and train the personnel of over 100 health centers on reproductive health issues and practices. The Ministry of Social Affairs is still in the process of finalizing a similar agreement. Of the centers included in the overall project, 44 are Comprehensive Care Centers of the Ministry of Social Affairs, and the rest are health centers of the Ministry of Public Health. The centers to receive this support and training have not yet been identified, but a certain number will be located in the Baalbeck and Hermel areas. Those centers will contribute to raising the level of health among the population.

#### UTILIZATION OF SERVICES:

A survey carried out by AUB Family Medicine Residents in 1997, assessing health service utilization, among the population of the five Beqa'a villages of Talia, Beit Shama, Hawsh el-Nabi, Hawsh el-Rafka, and Sefri found the following:

The average number of health related visits was 3.7 visits/person/year, while children under 6 years had an average of 4.8 visits, those between 6-17 years had an average of 1.9 visits, those between 18-64 had an average of 4.2 visits, and those 65 years or older had an average of 6.8 visits/ person/year.

Of the reported visits, 54% had consulted a health care provider for an acute illness, while 27.4% had consulted a health care provider for chronic diseases.

Only 3.2% of the surveyed population reported having received a health related visit to their homes in the six months prior to the survey, half of which were for vaccination.

Only 4.8% of children under 12 years of age received regular health check-ups. 79% of parents surveyed believed that their children did not need health care. Of the children that have been immunized, 35% had been immunized in private clinics, while 40% had been immunized in health centers and dispensaries.

21.6% of the surveyed population reported at least one episode of hospitalization per year, while 6.3% reported having used emergency services in the six months prior to the survey, the majority of whom reported receiving care from the ER of a nearby hospital.

Among married women under 45 years of age, 25% reported never having a regular check-up during pregnancy, while the majority of the rest reported regular follow-up by

an Obstetrician. 85.4% reported delivery by a physician in hospitals, while 13.6% reported delivery by a midwife in hospital.

In terms of dental care, 30.1% reported having made at least one visit to the dentist in the six months prior to the survey, of which 78.3% of the visits were for the treatment of caries or pain, and only 4% for preventive dental care.

Amongst those respondents that were personally interviewed, 34.1% classified available health services as "poor", while 36% classified them as "acceptable, 24.3% as "good", and 3.7% as "very good".

Another AUB survey of health needs in Hermel (1994) found that 39.5% for those surveyed reported that their children were immunized at a health center or dispensary, 38.1% during National Immunization Campaign days, 10.9% at school, and 8.8% at a private clinic.

Health care providers in Health Centers reported the following pattern in terms of the load of patients:

- It is thought that between 150-200 persons seek health care services, including Health Centers and private clinics, daily in the whole Hermel area.
- Red Cross records in Hermel for 1996 show that around 180 persons (including those suffering from chronic illnesses) had benefited from the services of the RC Center per month.
- Red Cross (Hermel) records for 1995, show that 63.5% of users were female.
- In Baalbeck, the International Islamic Salvation Organization-run Health Center reported a load of between 20-30 patients per day, including dental consultations.
- In Shmistar, the Amel-run Health Center reported a work load of between 250-300 patients per month.
- Majority of patients are children (Shmistar: 75%)
- Utilization rates are falling due to deteriorating economic conditions.
- Utilization rates are seasonal, varying according to productivity, being higher during harvest months.
- Utilization rates are directly related to the availability of drugs in the health centers.

#### 3.4. HEALTH PERSONNEL:

1. Physicians: On the whole physicians are available in area. An estimated 100 physicians are thought to be practicing between the two Qadas of Baalbeck and Hermel. (200 in the area between Riyaaq and Hermel- of which 28 ObGyn). Some foreigners are also practicing in area, though their license status is unsure. There appears to be an over-supply of physicians, to such an extent that all interviewed agreed that a physician in private practice was unlikely to be seeing more than an average of 3-5 patients per day.

This has led to a willingness, to work in health centers and dispensaries, where, while the pay may be low (in the range of LL 10,000/ visit), it is at least secured.

Low incomes and especially hard times over the past 18-24 months are blamed for the low turn-out. Private consultations are as low as LL 10,000 and do not exceed LL 20,000. The prevailing tariff in health centers is LL 6,000 for GP services and LL 8,000 for Specialist services.

2. Nursing staff: The overwhelming majority of nursing staff in the area are without any formal training. Most have gained on-the-job experience over the years. The number of nurses with a BS or TS degree are not known but are believed to be very low. BT level nurses are also believed to be few. The Vocational Training School in Baalbeck, with the support of the IRDP and Unicef, started last year a one-year training program for BP nurses. 37 nurses have recently graduated from this program. A number are believed to have found employment in the private or NGO sectors. A further group (of around 30) have just begun a second training session.

There is an acute shortage of trained nursing staff.

Summary bio-data sheets have been sent via IRDP staff to nursing personnel working in existing Governmental and NGO health centers in an effort to determine roughly the existing skills and areas for future training. This quick survey revealed that there are at present 94 persons working as nursing staff in the various health care centers and dispensaries in Baalbeck and Hermel. A listing of those personnel along with their place of service, the length of their experience, and their perceived training needs appear in Annex 4 at the end of this document.

Preliminary analysis of the information in the bio-data sheets have revealed the following:

27% of nursing staff held the degree of Midwife or BT nursing or higher

35% held the degree of nurse aid

22% held no degree

A handful held various degrees in laboratory science, in x-ray, social work. One held a BS degree in French literature.

The average years of experience was found to be 7 years, ranging between 1 and 30 years.

Average age was found to be 32 years.

In response to a question on their perceived training needs, 34% cited training in all areas, while 24% cited training in health education. A further 23% cited training in childhood illnesses. The rest had requests for training in various fields ranging from infectious diseases, to coronary diseases, to Thallasimia, to dental care.



3. Paramedical staff: There is a shortage of trained technical and para-medical support staff felt by all in the region. Lab technicians and x-ray technicians are very few. They mostly practice in the private hospitals of Baalbeck city.

4. Community Health Workers: As part of a national program, the Ministry of Health with WHO support ran a number of short (3 months) training sessions for community health workers in the region. During the period August 1990-October 1993, two training sessions for a total of 39 CHWs were carried out in the Hermel area, and three training sessions for a total of 64 CHWs were carried out in the Baalbeck area (total 103 CHWs of which 6 are males). Those were never employed by the Ministry of Public Health as had originally been planned. Their exact whereabouts are largely unknown, though it is believed that a few have been employed in NGO health centers. A few CHWs have recently been called upon by the Ministry of Social Affairs and Unicef to support EPI activities in villages around Baalbeck and Hermel. The reactivation and retraining of those CHWs within the suggested health sector programs could provide human resources capable of carrying out outreach and awareness raising activities.

## II. GOALS AND OBJECTIVES

Based on a request by the Health Sub-Committee of the Integrated Rural Development Project for Baalbeck and Hermel, work was initiated on carrying out a needs assessment for the area and on developing a revised Health Sector Project Document to serve as the guideline for health activities within the project to be implemented over the duration of Phase II of the Project (1998-1999).

The Project has as its basis the following objectives:

- The main objective of the Project is to carry out a needs assessment for the health sector in the areas of Baalbeck and Hermel, based on identifying the actual health problems and health sector problems of the population with the view to using this assessment to identify priorities and suggest strategies for action to address the health needs of the population..
- A second objective of the Project is to improve access to quality, reliable primary health care services in the areas of Baalbeck and Hermel, at prices affordable to the population, through support to the efforts of the Ministry of Public Health in the development and delivery of Primary Health Care. This to incorporate the development of new centers and the improvement of services in existing centers such that the concept of health care integrates firmly the goals of outreach and other health activities involving the local communities, at the design, implementation, and monitoring stages.
- A third objective of the Project is to strengthen health sector management and coordination in the Qadas of Baalbeck and Hermel through supporting existing Government structures and developing and setting in place mechanisms for future needs identification, planning, resource identification and mobilization, design and implementation, and monitoring and evaluation.
- A fourth objective of the Project is to encourage, reinforce, and support community involvement and participation in decisions and actions with an impact on the health and health status of the population through the support and implementation of such initiatives as "healthy villages" and the adoption of a BMN approach and strategy.

### III. STRATEGIES OF WORK

The success of the implementation of the various components of the Health Sector program of the Baalbeck-Hermel Integrated Rural Development Project will depend to a large extent on the adoption of a number of principles or strategies. Those are, briefly:

**I.** The adoption of an overall framework highlighting the importance of district-level management in the prioritization, planning, and implementation of health sector interventions and programs. The "District" constituting the unit for health sector planning and management such that the particular needs, resources, and capacities of each district determine the plan of action for the particular district.

**II.** Adopting the National PHC strategy formulated in 1993 and building upon the work being carried out by the Ministry of Public Health in terms of the strengthening of PHC, in particular, the forging of partnerships with NGOs working to make health care available to the wider population. The Ministry is also heavily involved in the establishment of a PHC level Health Information System to be the basis of its PHC planning efforts in the future.

**III.** Building upon the work of existing national programs such as Tuberculosis Control, Non-Communicable Diseases, Immunization, and School Health, in such a way that activities in Baalbeck and Hermel, complement those being carried out elsewhere around the country.

**IV.** Coordination between the various Programs, Projects, and Institutions (public, private, and NGO) working in the area.

**V.** Strengthening community involvement and participation in decisions and programs affecting their health and well-being.

A number of "activities", grouped under a number of "components" are suggested in what follows, in an attempt to address the main needs of the population within the framework of the five strategies outlined above.

#### **1. Strengthening Health Sector Management and Coordination**

One of the major weaknesses of the health promotion and health delivery system in the areas of Baalbeck and Hermel is the weakness of existing Ministry of Public Health structures in the area capable of carrying out the functions of needs assessment, planning, resource allocation, implementation and delivery, coordination, and evaluation. The two Qada Physician's Offices' have been weakened over the years through marginalization by the Central Ministry and lack of human and material resources.

The current project aims to redress some of these problems through assigning a Regional Health Coordinator, whose functions and responsibilities will include managing the day

to day running of the various Project components, as well as working with the QPOs to build capacities for problem identification, project planning, implementation, and monitoring and evaluation. Another central role to be played by the Health Coordinator is that of coordination of the various health sector projects taking place in the two districts.

It is proposed that the Coordinator will be working in close coordination with the **Health Sector Sub-Committee of the IRDP**, and would act as Secretary of that Committee. The responsibilities of the IRDP Health Sector Sub-Committee include providing the overall guiding vision for the program. Being chaired by the representative of the Ministry of Public Health would assure commitment to national priorities. It is suggested that the Ministry of Public Health delegate, be delegated to the other committees in order to establish ownership of the Project by the Ministry and involvement in implementation.

**A Regional Technical Coordinating Committee** could also be established to be made up of the following members:

- IRDP Health Coordinator
- Ministry of Public Health delegate
- Qada Physicians (at present same person is QP for both Qadas)
- Representative of Baalbeck QPO
- Representative of Hermel QPO
- Representative of the Ministry of Social Affairs
- Primary Health Care/ Reproductive Health Coordinator for the Beqa'a (joint MoPH/ MoSA/ UNFPA/ WHO project)
- Unicef Beqa'a Coordinator
- Others as needed (egs. Directors of Public Hospitals)

The responsibilities of this Committee would include the periodic reviewing of area-specific priorities and, through the participation of the Ministry of Public Health delegate, ensuring that activities conform to the objectives and priorities of the Ministry of Public Health and national programs.

On another level, it is suggested that a **Regional Health Committee** be established to include representatives of the local communities, other public sector institutions (such as the Ministry of Education) and the active NGOs in the area. This wider forum would meet 2 or 3 times a week to discuss general issues of concern to the community and to be updated by the Health Coordinator and the Technical Committee on the progress of work, and in order to elicit support for activities within the Project. This committee would be the forum in which to discuss issues such as community participation and healthy villages. Again the Ministry of Public Health delegate will need to attend and be involved in this committees' discussions and decisions in order to assure some degree of commitment.

The Health Coordinator will be based in Baalbeck (either in QPO or in IRDP premises) and will be assured appropriate office space and office support. S/he will have access to

all IRDP facilities and logistic support. It is foreseen that the Coordinator will be supplied with a vehicle in order to facilitate his/ her coordination, support, and monitoring role.

The Health Coordinator will be directly responsible, at least in the first year, for ensuring that work in the Health Centers proceeds as planned (recruitment of personnel, training, service delivery, adequate supplies of drugs and other materials, regular reporting) and will be responsible for highlighting problems as they emerge, and for suggesting solutions to those problems.

Assisted by an Accountant, the Coordinator will be responsible for the regular follow-up of the collection of fees for services in Health Centers, and for assuring that revenue generated is spent on items agreed upon.

On another level, it is the responsibility of the Health Coordinator to ensure that the various other components of the Project are progressing according to plan and that progress is harmonious. The Coordinator is again responsible for indicating problems at an early stage and for suggesting possible solutions.

It is also the Coordinator's direct responsibility to work closely with a national consultant (to be recruited) and with the Qada Physician's Office staff in both Baalbeck and Hermel in order to establish a system of data collection and analysis (population demographics, distribution, health problems, service allocations, preventive programs, etc..) with the aim of building capacities for future district level planning. The Coordinator will be responsible for ensuring that data collection and collation take place once the "model" is developed.

## **2. New Health Centers (6)**

The presence of comprehensive health care facilities, offering high quality curative and preventive services at a price that is affordable to the community is one of the essentials of the Primary Health Care system that the Ministry of Public Health is working to achieve. At present there are approximately 40 health centers, both public sector and NGO, offering services of varying quality in the areas of Baalbeck and Hermel. Those services will be complemented by an additional six Ministry of Public Health facilities spread around the two Qadas to act as the back-bone of PHC in Baalbeck and Hermel. Those are:

- Baalbeck PHC Center: Located at Baalbeck Public Hospital. Functional since December 1997. Currently offering MCH and Dentistry services.
- 'Irsal, Shmistar, Deir el-Ahmar, & Nabi Sheet: Four of twelve newly built Health Centers belonging to the MoPH. Recently built and fully equipped with Kuwaiti funding. Designed to offer comprehensive services, including dentistry, lab, and X-ray services. Those facilities are as yet unused, due to bureaucratic complications with staff recruitment.

- Hermel Rural Hospital PHC Center: Hermel Rural Hospital was totally renovated and new equipment was purchased by the IRDP. At present the hospital is functional only at the level of out-patient clinics.

The present project aims to play the role of facilitation for making these six, crucially important Health Centers functional and assuring that they offer high quality services at affordable prices. It is proposed that these six Centers would act as "model" centers for the implementation of various concepts and programs, including: Medical records and a new HIS, TB control, community out-reach, reproductive health, school health, etc...

It is further proposed that a local consultant be identified and recruited to develop a reference manual suggesting standard procedures for the management and administration of Health Centers. The manual should address issues such as a Center's organigram, personnel dynamics, personnel management, and day-to-day administrative issues. The manual should also address the issues of patient-flow within the Center, standard data and information collection, and delineate responsibilities for patient management clearly. The manual will also need to address the issues of budgeting and accounting, especially in light of the experience of fee collection which is a new endeavour for the Ministry. The manual will also need to address the issue of stock keeping, especially with reference to the upkeep and maintenance of a pharmacy.

It is foreseen that such a manual, while it is to be developed within the scope of the Baalbeck-Hermel project, will be adopted and utilized by the Ministry in its current rehabilitation efforts in its other Health Centers nationally.

Within the scope of having six comprehensive PHC Centers, arises the need to have secondary level referral services able to accommodate cases sent on from these centers. Baalbeck Public Hospital and Hermel Rural Hospital are the two Ministry of Public Health facilities in the area capable of fulfilling this role. Baalbeck Hospital is at present running sufficiently well to be able to receive simple cases referred to it for hospitalization (deliveries, simple operations). Baalbeck Hospital is, furthermore, included within a World Bank funded hospital to rehabilitate and upgrade services in Ministry hospitals and will be benefiting from the infrastructural, equipment, and management packages offered through that channel. Hermel Rural Hospital on the other hand, is severely crippled by the absence of a number of key elements, including an anesthesiologist, a radiologist, and nursing staff. It is hence, with the aim of complementing PHC services with secondary level referral services that the present Project proposes to act as a facilitator for the recruitment of minimal essential staff.

A separate project document (see Annex 1) has been drafted outlining the inputs necessary for the running of the six Health Centers, and outlining the contributions that the various partners, Ministry of Public Health, CDR, IRDP, and community, are expected to play to assure the running of the Centers for an initial period of two years. It is expected that a

Joint Agreement will be drafted between the Government and UNDP for the implementation of the proposals in the project document.

### **3. Improvement of Services in Other Health Centers in Baalbeck & Hermel**

While having six "model" Health Centers will serve the purpose of upgrading PHC service delivery in the area on the long term, an area as large as that of Baalbeck-Hermel and as geographically dispersed (more than 220 villages) needs to be served by a wider network of PHC facilities.

As stated earlier, there is currently a large number of Health Centers in the area of Baalbeck and Hermel (40), largely run by national or local NGOs. The extent and quality of services offered by these Centers is, however, highly variable, as evidenced by their responses to a short questionnaire on the nature of services offered and the number and qualification of staff (see Annex 3).

This Project proposes to support those existing Health centers and to improve the quality of services being offered by them. This is proposed to be achieved on four different levels:

1. Through the assurance of the present of basic equipment at each Center: Scales, examination kits, first-aid kits etc..
2. Support to active health centers through the provision of a minimal package of essential drugs.
3. Through the facilitation and support for the distribution of drugs for chronic diseases (joint MoPH/ YMCA program)
4. Through the training of staff with the aim of upgrading of skills and the incorporation of essential PHC programs within the work of these Centers: Oral health, TB control, Chronic diseases, immunization, reproductive health, etc..

The coordination of activities carried out at the level of the PHC Centers will be the responsibility of the Health Coordinator, who will ensure that interested Centers are given the opportunity and encouraged to participate in activities and training sessions.

### **4. Community Mobilization**

One of the basic principles of Primary Health Care and of ensuring the sustainability and continuity of development projects and programs, is the involvement and participation of the local community at all levels of health planning and service delivery. This is based on the notion that development is a multi-sectoral process which address the overall problems and needs of a community. In fact, community participation is at the heart of recent development theories and models including the Basic Minimum Needs (BMN) approach being advocated by the WHO, centered around the concept of achieving a better quality of life for a community through a dynamic and participatory process in order to ensure sustainability and viability.

So far, communities have tended to be marginalized by development programs, including the health and social sectors of the IRDP. It is, therefore, seen as essential that efforts be directed at community mobilization and the encouragement of the local community and local individuals to take an active interest in those issues and activities with a direct bearing on their health and well-being.

The IRDP has already gained some experience in community work in the area through the appointment of village and area representatives working closely with IRDP on the program of small loans. Work on that front, however, has been limited, and has not extended to the development of structures such as village committees capable of vocalizing the community's felt needs and priorities, nor has work been translated into active involvement of the communities in efforts to improve conditions in the villages and towns.

The present project proposes to begin work in a few villages, 4-6 initially, to encourage the local residents to become active in issues and activities with an impact on their general health and well-being. Programs in environmental health (such as the WHO advocated healthy towns and healthy villages) and school health are especially amenable to intervention and participation by the local communities they serve. One option would be to begin community mobilization work through the new Health Centers of the MoPH, where fostering a sense of ownership of the Centers might serve to bring people and community leaders together.

It is suggested that a short-term local consultant be identified and recruited to work with the Health Coordinator survey the local communities in the area, and to assess the existing local committees already formed through IRDP in order to determine whether or not it would be worthwhile building on those structures. The consultant would then be responsible for putting forward suggestions for activating or mobilizing the chosen communities along certain issues or activities of concern to the population. Once villages for community work are identified, visits to neighbouring Syria could be arranged for (2-3) members of local committees to gain first hand knowledge of potentially similar Healthy Village experiences.

It is also suggested that a visit be arranged for number (2-3) of active local committee members to Jordan in order to become familiar with the BMN program being carried out by the Noor al-Husseini Foundation in 12 villages throughout Jordan.

It is further foreseen that Health Center staff, especially those recruited from the same village or its close vicinity play an instrumental role in this process. For this they would need to be sensitized and trained themselves.

## **5. Nursing School**

The shortage of nursing personnel in terms of both quantity and quality are a chronic problem nation-wide. This shortage is especially acute in Baalbeck and Hermel, where



qualified nursing personnel is hard to come by. Over the past three years the IRDP has been partially funding a one-year course for Nurse-Aides (Brevet Professionnel) at the Baalbeck Vocational Training School. Approximately 60 Nurse-Aides have graduated so far. Although they had been promised employment upon graduation, it is unclear where those have gone to work. It is commonly thought that the majority have been absorbed by the area's private hospitals. The IRDP has employed two of the BP nurses to work in the PHC at Baalbeck Hospital. Some have chosen to continue on a three-year course to obtain a Baccalaureate Technique in Nursing, which would make them eligible for licensing. None have so far graduated. The initial training program was executed with Unicef and Ministry of Vocational training support.

It is recommended that the Project should no longer support the training of BP nurses, as a large enough number has already been trained.

Rather, the present Project proposes to concentrate efforts on support for the training of BT nurses, in an order to assure a minimal level of quality of services of PHC delivery. Addressing this need will be mainly through support to BT trainees, as well as through the incorporation of the recent modifications to the BT curriculum, and through the introduction of changes to the practical training being offered in the hospitals and health centers of the area.

A short-term local consultant could be recruited to work with the teaching staff of the Baalbeck Vocational Training School in order to assess needs and custom-design a training program for BT nurses catering to the needs of PHC in the area.

The Project would also be responsible for supplying new educational and training materials for the programs, such as books and audiovisual materials.

It is foreseen that coordination with the 6 new Health Centers and the 2 Public Hospitals would proceed on two fronts:

1. The Centers and Hospitals would be used for the application of practical training, thus exposing the trainees to real-life situations within communities very similar to those they are likely to be working in upon graduation.
2. The Centers would resort to this pool of BP nurses (and BT where available) for the recruitment of staff to run them, provided the nurses actually come from the same community served by the Center or a village nearby.

## **6. Community Health Workers**

Community Health Workers constitute an important component in any PHC system. Outreach work and work within the community depends to a large extent on the presence of trained CHWs based in the community and aware of its problems and the nuances of dealing with the local population. This is especially true of an area such as Baalbeck and Hermel which has a large number of disperse villages and human settlements, the majority of which are without any health facilities. It is in such villages that the presence

of a person with basic training (three months) could be useful as a vehicle for the implementation of basic programs such as immunization and public health.

Between August 1990 and October 1993, a number of Community Health Workers from villages and towns in Baalbeck and Hermel were trained for three months in a joint Ministry of Public Health / WHO program. A total of 5 training sessions were held, and a total of 103 CHWs were trained, 64 in Baalbeck and 39 in Hermel. While the original arrangement was for those to be found employment through the Ministry, this did not take place, and whereabouts of the trained CHWs are largely unknown.

Some of the CHWs are to be found working in some of the NGO Health Centers, while others have been collaborating with the Ministry of Social Affairs and Unicef, especially in immunization campaigns.

The present Project proposes that those CHWs, who constitute a substantial group, and are especially important in the more remote villages, be located and re-trained to play their role in health promotion, prevention, and even curative role (TB control being a case in point). It is proposed that the Health Coordinator relying on the local village representatives of the small-credit program of IRDP locate those CHWs and assess their willingness to participate in health activities ranging from "healthy villages" to immunization to the application of the DOTS program in TB control.

A short training program for the CHWs would then be designed with WHO, Unicef, or UNFPA assistance to integrate them into PHC programs. This would entail covering the costs of programs and materials to be used. It is, however, essential, that the Project finds the mechanisms by which the community itself is encouraged to bear the costs of nominal payments to CHWs, as a reflection of a sense of ownership of programs.

#### **7. Training of Physicians on Clinical Guidelines**

In the interest of quality control as well as efficiency and efficacy, standards of treatment for common illnesses need to be in place. The compliance of physicians to those would then be used as a measure of achievement and high quality of care.

This is especially relevant in the situation of Baalbeck and Hermel where physicians practicing in the area come from very varied academic training backgrounds. A unification of vision and practices becomes necessary in this case.

Physician guidelines and protocols of treatment for diseases have not yet been formulated nor adopted for Lebanon, however. Work is currently underway in a joint program between the American University of Beirut Medical Center and WHO to develop such guidelines for the management of common diseases including chronic illnesses. The first set of guidelines is expected to be ready at the end of 1998, and the guidelines should be ready for training in early 1999.

The present Project proposes that once this first set of guidelines is ready, two types of short training session be held. The first for key physicians responsible for the management of certain PHC programs, while the second targets a wider audiences of physicians practicing in hospitals, health centers and clinics (Public, Private and NGO) in the area of Baalbeck and Hermel. The training would serve to refresh and upgrade skills where necessary and as an incentive for physicians to motivate them to be more involved in PHC.

### **8. TB Control**

Tuberculosis is becoming an increasingly important health problem in the world, Lebanon being no exception. The National TB Control Program of the Ministry of Public Health aims to tackle the spread of TB in the areas of Baalbeck and Hermel through a comprehensive program of detection, treatment, and prevention.

A separate short project document has been developed outlining the major components of a TB control program for the area within the scope of the IRDP. See Annex 6.

### **9. Immunization**

Levels of immunization among children in Baalbeck and Hermel have been lagging behind those of children elsewhere in the country. There still appears to be some resistance by parents to immunization due to miss-information.

The present Project proposes to join efforts with the Ministry of Public Health, Ministry of Social Affairs, and Unicef to raise immunization coverage rates and to increase community awareness and demand for immunization. The Project will tackle this issue on several fronts: through the Health Centers, through the training of nursing staff, through the re-training of CHWs, through the training of staff at NGO Health Centers, as well as through the School Health program.

A joint project between the IRDP and Unicef could be the vehicle for the involvement of the Project in supporting immunization efforts.

### **10. Reproductive Health**

Maternal and reproductive health is still relatively poor in the area of Baalbeck and Hermel. Families in the area tend to be larger, having a higher number of children. While deliveries attended by a health care professional are on the rise, many are still taking place attended by birth attendants. Recent AUB research (1998) has concluded that the rate of stillbirth in the Beqa'a is 12.6/000 compared to 5 in the more developed countries, which also reflects on the poor quality of prenatal care. The use of family planning methods is still low.

At present the National Reproductive Health Program (NRHP) is about to begin a large-scale joint project involving the Ministries of Public Health and Social Affairs with UNFPA funding and WHO technical assistance. The aim of the Program is the

improvement of reproductive health, especially maternal health and delivery conditions, nation-wide. Discussions with the Program reveal their willingness to concentrate on the area of Baalbeck and Hermel as their focus of attention in the Beqa'a Mohafaza.

The present Project proposes that coordination be close with the National Reproductive Health Program on the following activities:

- Training of Health Center staff on prenatal and postnatal care and on referral.
- The provision of basic diagnostic equipment and materials in larger the Baalbeck and Hermel hospitals and in the larger Health Centers.
- Family Planning methods are regularly distributed and are available in Health Centers. Staff are trained in health education and counseling.
- The skills of practicing midwives and other birth-attendants are assessed and short training courses are designed to improve practice.
- Delivery "clinics" are surveyed and assessed to ensure that they meet basic standards of care. Equipment is provided where needed, including midwifery kits.

While the bulk of the work on this component will be the responsibility of the NRHP, the IRDP Project will be responsible for maintaining regular contact and coordination with that Project (through the Coordinator and the Coordination Team), for identifying problem areas or areas of need, and for ensuring and facilitating the involvement of staff collaborating with the Project in reproductive health activities.

Other work in reproductive health will be carried out in collaboration and coordination with the National Aids Program, on the prevention of AIDS and STDs. This component will concentrate mainly on the integration of the area of Baalbeck and Hermel and the health facilities in the area in the training programs of NAP, with the production of training modules and training and health education materials addressing the particulars of the population.

## **11. Water Supplies & Water-borne diseases**

There appears to be universal agreement that contaminated water sources and water-borne diseases are responsible for the major part of disease and infections in Baalbeck and Hermel. Access to safe clean water is a problem for the majority of the population in the area.

Long-term solutions resulting in clean safe water for all would entail major infrastructural rehabilitation work. A World Bank funded project has recently begun work on the improvement of the water supply network. In the meantime, however, there are several interventions that can alleviate the problems of contaminated water supplies.

The present Project proposes to carry out activities in the following areas:

1. Testing and small-scale improvements of water sources
2. Public education on the cleaning and storage of water

This is to be carried out on several fronts at the same time.

First: Through the training of Health Inspectors from the two QPOs, of Health Center staff, and the CHWs (to be linked to Community Mobilization and Healthy Villages program) on the identification, testing, and small-scale improvements of water sources. Community mobilization and involvement are to be encouraged in this process.

Second through a public education campaign targeting the population of the area. This is to be carried out on two levels, directly by health inspectors, Health Center staff, and CHWs as well as by an education campaign employing print materials and audio-visual media where appropriate.

The Project will be responsible for coordinating work on the small-scale improvement of water supplies through the provision of training and through funding the production and distribution of educational materials.

## **12. School Health**

The vast majority of school-age children are enrolled in schools in Baalbeck and Hermel. The school environment, hence, becomes extremely important in terms of its impact on health. On the one hand children are exposed to the schools' environment, which more often than not is in need of considerable improvement. On the other hand, schools are a very important learning locale where children can be taught new concepts and where they can learn new behaviours and carry them home to the rest of their families.

The present Project proposes to work within the framework of the national pilot school health program, currently being implemented by the Ministry of Education with the support of WHO, Unicef, and Unesco. The present Project will focus on Environmental Health and health education: Mainly through the training of Health Educators or other teachers in the schools, to activate the school community towards improving overall health and hygiene conditions.

The Health Coordinator will be responsible for acting as liaison for this program and for ensuring the logistic and facilitation support that the school children and teachers need.

Selected teachers will be trained in health education and will be supplied with the necessary education aids and materials. School groups or clubs will be supported with small-scale funds to enable them to implement activities in their schools.

## **13. Oral & Dental Health**

A separate document has been drafted for this joint project with the Lebanese University Faculty of Dentistry. See Annex 5.

## **14. Chronic Diseases**

With changes in life-style and with increased longevity, chronic diseases are increasing in the area of Baalbeck and Hermel, with hypertension and CVD cited as common health

problems among the adult population. Hence, a program of early detection, prevention, and treatment needs to be embarked upon.

The present Project proposes to collaborate with the newly established national Chronic Diseases Control Program to design and implement a program of chronic disease control in the area. At present the CDCP is working on finalizing the treatment protocols for Diabetes and will be moving on to developing protocols for hypertension and CVD. Once those are ready, physicians in Health Centers in the area will be trained on them and will be offered the necessary support, including drugs to carry out effective treatment.

Concurrently, public health education campaigns focusing on prevention and modifications in life-style will need to be carried out through existing health care facilities, especially those currently involved in the Ministry of Public Health/ YMCA program for the distribution of drugs for chronic diseases. This will involve the design and production for health education materials on both health promotion and prevention, as well as on self-care guidelines for patients suffering from a chronic diseases.

### **15. Emergency Care**

Medical care in emergencies is of primary concern to the population and the health care providers alike in Baalbeck and Hermel. At present emergency medical facilities are virtually non-existent in Hermel, while Baalbeck Public Hospital is incapable of treating most emergency cases, preferring to refer patients to other private hospitals in the area.

Emergency transport is another major problem, with a very limited number of ambulances available. No effective communications system exists to direct patients to the nearest referral center, and in many case valuable time is being wasted on the road searching for a hospital that will accept the patient.

While the problems of Emergency Medical Care are too complex to be dealt with within the scope of this project, a number of small interventions are possible. The present Project proposes to improve emergency care through a number of channels:

1. Assistance and support to Hermel Rural Hospital to enable it to perform small operations and deliveries, and support in terms of the recruitment of drivers to run the 2 ambulances already purchased by IRDP for Hermel Hospital, on a round the clock basis. For details, see Annex 1.
2. Design and implementation of a communications system to be established with Baalbeck Hospital for the facilitation of referrals, thereby saving patients the journey to Baalbeck Hospital in case the hospital is unable to accommodate them.
3. Assuring the supply of basic emergency equipment to existing transport vehicles and ERs in the area.

4. Development of training modules, possibly through collaboration with AUB, for physicians in Health Centers in basic emergency care, and establishing a system of having a physician "on call" attached to Health Centers- initially the six new MoPH Centers.

#### **16. HIS & Medical Records**

The lack of reliable data and information was found to be a main obstacle to planning health care services in the area. The establishment of a regular information collection system is fundamental in terms of determining health needs and priorities.

The Ministry of Public Health has started the implementation of a new Health Information System in a pilot of 30 Health Centers (both public and NGO). The system depends on the keeping of individual and family records and on recording interventions and procedures undertaken. This present Project proposes to include the same records and filing system within the Health Centers under its direct control (initially in the 6 new Centers). This includes producing and making available the files and record sheets, and training staff in collaboration with the Ministry of Public Health, on the newly developed system.

As the ultimate aim of the Ministry's HC HIS is to eventually computerize data and information for easier access and retrieval, the Project could collaborate in that sphere as well, providing funding and training.

The Health Coordinator will be responsible for offering logistic support when needed and for ensuring that records and files are kept by Health Centers, and that regular (monthly) reports are generated by the Centers.

MAIN COMPONENTS OF IRDP HEALTH SECTOR PLAN AND ACTIVITIES FOR 1998-1999

COMPONENT	OBJECTIVE	ACTIVITIES	RESOURCES	PARTICIPANTS	BUDGET(S)
I.Strengthening Health Management and Coordination	<ul style="list-style-type: none"> <li>IRDP Regional Health Coordinator in place to manage health program, acting as liaison between IRDP &amp; various program components</li> <li>Coordination Committees established (IRDP Health Sector Sub-Cttee, Regional Technical, Regional Health Cttee)</li> <li>Support existing district level health management structures in Baalbeck and Hermel to enable them to carry out problem identification, planning, program implementation, budgeting, and evaluation role</li> <li>Support Health Centers in region to enable them to identify catchment population, identify &amp; respond to their needs</li> </ul>	<ul style="list-style-type: none"> <li>Develop ToRs for Coordinator</li> <li>Recruit Coordinator</li> <li>Establishment of Coordination Team</li> <li>Establishment of Local Health Committees</li> <li>Training of existing district staff on information collection &amp; processing, planning, implementation, budgeting, and m&amp;e</li> <li>Establishment of data-bases in Baalbeck &amp; Hermel</li> <li>Supply of logistic office &amp; communications support</li> <li>Collect &amp; collate information on population demographics &amp; distribution, available health &amp; social services (Hospitals, HCs, schools, human resources, etc..) within HCs</li> <li>Train HC staff on catchment population</li> </ul>	<ul style="list-style-type: none"> <li>Salary for 2 years</li> <li>Office Space</li> <li>Office Equip: PC, photocopying, ...</li> <li>Transport (car)</li> <li>Consultant to develop model for district management &amp; develop some data collection models</li> <li>Support for data collection</li> <li>Support for meetings of Cttees</li> <li>Facilitation for MoPH delegate</li> </ul>	<ul style="list-style-type: none"> <li>IRDP</li> <li>MoPH</li> <li>WHO</li> <li>Unicef</li> <li>NGOs</li> <li>Local Cttees</li> </ul>	70.000



<p><b>2. New Health Centers (6)</b></p>	<p>identification &amp; problem prioritization</p>	<p>• Local "health committee" established. • Recruitment &amp; training of Personnel: Admin and Medical • Manual of Management and procedures developed for HC • Stock-keeping and inventory training. • Purchase of necessary medical &amp; non-medical supplies • Provision of last-minute rehabilitation &amp; maintenance • Distribution of drugs.</p>	<p>• Salaries for 2 years • Supply of medical &amp; non-medical materials • Local consultant to develop HC Management Manual • Drugs from MoPH &amp; YMCA • Purchase of additional drug supplies</p>	<p>IRDP MoPH Unicef CDR Local Committees</p>	<p>1,377,520</p>
<p><b>3. Improvement of Services in Other Health Centers in Baalbeck &amp; Hermel</b></p>	<p>• HCs requiring assistance identified (geographic distribution, size of activities...) • Inventory of needed basic equipment compiled • Equipment purchased &amp; distributed. • Minimal essential drugs package purchased. • Drugs distributed to Centers on an established schedule</p>	<p>• Basic clinical and diagnostic equipment. • Basic Drugs purchased. • Vaccines provided • Chronic disease medications provided</p>	<p>IRDP MoPH Unicef UNFPA YMCA TBCP (MoPH)</p>	<p>30,000</p>	

<p><b>4. Community Mobilization</b></p>	<p>to strengthen involvement in vertical programs.</p> <ul style="list-style-type: none"> <li>Local community mobilized in 3-4 villages, and local health committees established.</li> <li>Community takes an active role (Local Health Ctees) in design and implementation of various programs: Healthy Villages, School Health, Environmental Health, CBR</li> </ul>	<ul style="list-style-type: none"> <li>Personnel trained in out-reach health care</li> <li>Meetings held with already existing local committees.</li> <li>Consultant to formulate PoA for Community Involvement and mobilization</li> <li>2-3 Local Ctee Members to visit Syria (4 days) to observe Healthy Village program</li> <li>2-3 Local Ctee Members to visit Jordan (5-6 days) to observe BMN program of NIHF</li> <li>Coordination with established programs for training and funding of small-scale activities</li> </ul>	<ul style="list-style-type: none"> <li>Local consultant to develop PoA</li> <li>Transport and support for local village and Local Ctee meetings</li> <li>Funding for village-level health activities</li> <li>Training of community organization and proposal formulation</li> <li>Visit to Syria</li> <li>Visit to Jordan</li> </ul>	<p>IRDP MoPH MoSA WHO Unicef UNDP</p>	<p>26,000</p>
<p><b>5. Nursing School</b></p>	<p>Nursing staff trained and available to run various health programs</p>	<ul style="list-style-type: none"> <li>Consultant to identify training needs and resource requirements</li> <li>Training of BT new nurses</li> <li>Development of curricula for various categories</li> <li>CIHWs surveyed: location, job, interest.</li> </ul>	<ul style="list-style-type: none"> <li>Consultant</li> <li>Training materials: printed, &amp; audio/visual</li> </ul>	<p>IRDP MoPH MoVT WHO Unicef LebUniv</p>	<p>6,000</p>
<p><b>6. Community Health Workers</b></p>	<p>CIHWs (103) trained with WHO support in Baalbeck</p>	<ul style="list-style-type: none"> <li>Cost of survey, transport, etc..</li> </ul>	<ul style="list-style-type: none"> <li>Cost of survey, transport, etc..</li> </ul>	<p>IRDP WHO</p>	<p>6,000</p>

<p>&amp; Hermel between 1990-1992. located and skills upgraded for work within community, possibly through Health Centers.</p>	<p>etc..</p> <ul style="list-style-type: none"> <li>Local consultant identified and recruited to assess skills &amp; propose short training for programs (TB, Oral health, Immunization, etc..)</li> <li>Integration of environmental health issues, healthy villages, community work, health education.</li> <li>Short training workshops</li> </ul>	<ul style="list-style-type: none"> <li>Local consultant</li> <li>Trainers</li> <li>Cost of training sessions</li> <li>Training &amp; health education materials</li> </ul>	<p>Unicef</p>
<p><b>7.Training of Physicians on Clinical Guidelines</b></p> <p>Physicians working in HCs and on health programs trained on Clinical Guidelines under development. Upgrading of skills &amp; introduction of PHC programs. (To begin 1999, when Guidelines completed)</p>	<ul style="list-style-type: none"> <li>Key physicians trained to manage certain PHC programs.</li> <li>General training sessions open to larger group.</li> </ul>	<ul style="list-style-type: none"> <li>Guidelines printed and distributed</li> <li>Trainers</li> </ul>	<p>3,000</p> <p>IRDP MoPH WHO AUB</p>
<p><b>8.TB Control</b></p> <p>TB Detection and Treatment program functional in Baalbeck and Hermel regions.</p>	<ul style="list-style-type: none"> <li>Two Diagnosis Centers established (Hermel &amp; Baalbeck)</li> <li>8-10 Key treatment Centers identified, staff trained, and supplied with drugs.</li> <li>Staff from wide network of HCs trained and</li> </ul>	<ul style="list-style-type: none"> <li>Lab and X-ray equipment and materials for 2 Diagnostic Centers.</li> <li>Drugs for treatment centers.</li> <li>Trainers</li> <li>Health Ed. materials, printed &amp;</li> </ul>	<p>13,000 + Drugs</p> <p>IRDP MoPH WHO</p>

<p><b>9.Immunization</b></p>	<p>Raise levels of immunization coverage to National rates.</p>	<p>sensitized.  <ul style="list-style-type: none"> <li>Community awareness raised through public education</li> <li>Vaccinations &amp; other materials available</li> <li>Community awareness and demand raised</li> <li>Training of NGOs</li> </ul> </p>	<p>audio/ visual  <ul style="list-style-type: none"> <li>Supervision team</li> </ul> </p>	<p>2,500</p> <p>IRDP MoPH Unicef</p>
<p><b>10.Reproductive Health</b></p>	<p>Improve maternal health and delivery conditions.</p>	<ul style="list-style-type: none"> <li>HC staff trained.</li> <li>Diagnostic equip and materials available.</li> <li>FP methods available.</li> <li>Community awareness and demand raised.</li> <li>Practicing midwives and other attendants trained.</li> <li>Delivery clinics equipped.</li> <li>Midwives supplied with necessary "kits"</li> </ul>	<ul style="list-style-type: none"> <li>HCs supplied with essential equipment and materials.</li> <li>US machines supplied where necessary.</li> <li>FP methods purchased and distributed.</li> <li>Delivery clinics equipped with necessary basics.</li> <li>Materials purchased and distributed among midwives</li> </ul>	<p>4,000</p> <p>IRDP MoPH Unicef</p>
<p><b>11.Water Supplies &amp; Water-borne diseases</b></p>	<p>Increase access to safe drinking water.</p>	<ul style="list-style-type: none"> <li>Water sources tested</li> <li>Water sources improved</li> <li>Public education on</li> </ul>	<ul style="list-style-type: none"> <li>Train of health inspectors</li> <li>Train of staff on</li> </ul>	<p>20,000</p> <p>IRDP MoPH MoHWR</p>

<p><b>12. School Health</b></p>	<p>Improvement of health and environment within schools.</p>	<p>cleaning and storage of water</p>	<p>education</p> <ul style="list-style-type: none"> <li>• Public education campaign in place</li> <li>• Small-scale repair work to water sources</li> <li>• Long-term improvement of water network</li> <li>• Support for environmental health activities &amp; campaigns, etc..</li> <li>• Trainers &amp; training</li> <li>• Support to SH focus persons</li> </ul>	<p>Unicef</p>	<p>35,000</p>
<p><b>13. Oral &amp; Dental Health</b></p>	<p>Improvement of health and environment within schools.</p>	<p>cleaning and storage of water</p> <ul style="list-style-type: none"> <li>• Survey of existing schools and problems encountered</li> <li>• Key focus persons identified in schools.</li> <li>• Focus persons trained.</li> <li>• Improvement of environmental conditions in coordination with School Management, teachers, and Local Committees.</li> <li>• Training of teachers as Oral Health educators</li> <li>• Oral health programs implemented: Fluoride gargling, toothbrush distribution &amp; use, &amp; ART</li> <li>• Regular dental check-ups of students</li> <li>• Health education Programs for students</li> </ul>	<p>education</p> <ul style="list-style-type: none"> <li>• Appropriate health education material produced</li> <li>• Fluoride supplements</li> <li>• Toothbrushes</li> </ul>	<p>IRDP WHO LebUniv MoEduc Private Sector</p>	<p>125,000</p>

<b>14. Chronic Diseases</b>	<p>Improvement of prevention, early detection, and treatment of chronic diseases. In first instance: Diabetes, Hypertension, &amp; CVD</p>	<ul style="list-style-type: none"> <li>• Public education on prevention and life-style change.</li> <li>• Training of HC staff on early detection and screening.</li> <li>• Training of HC staff on treatment protocols.</li> <li>• Assurance of drug availability.</li> <li>• Communication system established with Baalbeck Hospital for referrals</li> <li>• Transport system developed between villages and major hospitals</li> <li>• Basic equipment supplied to ERs &amp; transport vehicles</li> <li>• Development of training modules for physicians in HC on basic emergency care</li> <li>• Establishment of system of "24 hr coverage" at HCs for minor emergencies</li> <li>• Train HC staff on MoPH's newly</li> </ul>	<ul style="list-style-type: none"> <li>• Consultant to identify training needs (NCDP)</li> <li>• Health education material produced &amp; disseminated</li> <li>• Drugs for Chronic diseases distributed</li> </ul>	<p>IRDP MoPH AUBMC NCDP YMCA</p>	<p>6,000 + Drugs</p>
<b>15. Emergency Care</b>	<p>Improvement of system of communications, transport, treatment &amp; care of emergency cases</p>	<ul style="list-style-type: none"> <li>• Communication system established with Baalbeck Hospital for referrals</li> <li>• Transport system developed between villages and major hospitals</li> <li>• Basic equipment supplied to ERs &amp; transport vehicles</li> <li>• Development of training modules for physicians in HC on basic emergency care</li> <li>• Establishment of system of "24 hr coverage" at HCs for minor emergencies</li> <li>• Train HC staff on MoPH's newly</li> </ul>	<ul style="list-style-type: none"> <li>• Installation of communications system between Centers &amp; Baalbeck Hospital</li> <li>• Rehabilitation of existing transport vehicles</li> <li>• Purchase of basic First Aid materials for HCs</li> <li>• Training physicians on basic emergency care</li> </ul>	<p>IRDP MoPH WHO AUB Leb Univ Red Cross NGOs</p>	<p>35,000</p>
<b>16. HIS &amp; Medical Records</b>	<p>• Create information base on health and related</p>	<ul style="list-style-type: none"> <li>• Train HC staff on MoPH's newly</li> </ul>	<ul style="list-style-type: none"> <li>• HIS forms (MoPH)</li> <li>• Training</li> </ul>	<p>IRDP MoPH</p>	<p>20,000</p>

	<p>issues within HCs.</p> <ul style="list-style-type: none"> <li>• Individual &amp; Family medical records available for all users</li> </ul>	<p>introduced HIS</p> <ul style="list-style-type: none"> <li>• Medical records completed regularly</li> <li>• Reports generated</li> </ul>	<p>Workshops</p> <ul style="list-style-type: none"> <li>• PCs &amp; running items</li> </ul>
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**Note:** All program activities are to include all active health centers in the region.

#### IV. MONITORING AND EVALUATION

The processes of monitoring and evaluation are to be an integral part of this project. As this is the second phase of a larger program which is likely to be renewed at the end of the two period, clear, objective assessments of the progress of work and of achievements are fundamental.

Monitoring and evaluation need to proceed along four different levels:

1. Day-to-day monitoring, to be carried out by the Health Coordinator as well as other members of the Coordination Team. The objective of this level of monitoring is to ensure that work on the different components proceeds smoothly, and that the Project management is aware of progress on a regular basis. Another important function of day-to-day monitoring is that problems, should they arise, are detected early, thereby, improving the chances for remedying them. It is the responsibility of the Health Coordinator to provide regular report of the progress of work to the Health Sub-Committee and IRDP's management.
2. The IRDP's management is responsible for financial and budgetary monitoring of the Health sector Project in such a way as to ensure efficiency and proper spending. Another objective is to ensure adherence to the rules and regulations of the various UN agencies involved in funding activities.
3. The original goals, objectives, and strategies of the Project need to be closely and regularly monitored by the Health Sub-Committee to ensure that, on the one hand, work and activities continue to meet the requirements of objectives, and on the other that objectives as set are still relevant and realistic. This is to be done through close review of the reports of the Health Coordinator as well as through periodic field visits by Committee members.
4. An independent consultant should be brought in at the end of the two-year period to review the achievements of the Project and to assess the Impact that the Project has had on the target population. This needs to be carried out with a view towards making recommendations for further involvement, and suggesting options for future programs and activities.



## VI. BUDGET

**LIST OF PERSONS CONSULTED**

1. Dr. Walid Ammar, Director-General, Ministry of Public Health
2. Dr. AbdulHay Mechbal, WR WHO
3. Mr. Mahdi Mohammad Ali, Regional Director, UNDCP
4. Dr. Mohammad Ali Kanaan, Head, Community Health, Ministry of Public Health
5. Dr. Ghassan Siblani, CDR
6. Mr. Hussein Haidar, Head, Health & Social Centers, Ministry of Social Affairs
7. Dr. Mohammad Ferjani, Manager, Baalbeck-Hermel IRDP, UNDP
8. Dr. Batoul Yahfoufi, Head Health Sector, Baalbeck-Hermel IRDP, UNDP
9. Dr. Ghassan Hamadeh, Director University Health Services, AUB
10. Dr. Rami Kanso, Director Baalbeck Hospital, Ministry of Public Health
11. Dr. Mukhtar al-Omairi, Director Hermel Rural Hospital, Ministry of Public Health
12. Dr. Nabil Kharrat, Director, Secours Populaires Libanais
13. Mr. Khaled Srour, Director of Research, National Social Security Fund
14. Dr. Elissar Radi, Manager, National Aids Program
15. Dr. Ali Zein, Health Officer, Unicef
16. Dr. Antoine Istphan, Manager, National Non-Communicable Diseases Program
17. Dr. Vanda Barakat, Director, Central Lab, Ministry of Public Health
18. Dr. Zaher Abu-Shakra, Director, beit Eddine Health Center, Ministry of Public Health
19. Dr. Abir Makarem, Pharmacy Unit, WHO/ Ministry of Public Health
20. Ms. Mona Mahfouz, Director, Red Cross Health Center, Hermel
21. Mr. Ali Shaheen, Director, Faraj Ballouq Health Center, Baalbeck

22. Dr. M'ianios Saadeh, Manager, National TB Control Program
23. Mr. Mohammad Abdallah, Director, Baalbeck Vocational Training School
24. Dr. Ismail Sukkariéh, MP for Baalbeck
25. Dr. Ghassan al-Ozair, Director, 'Amel Health Center, Shmistar
26. Mr. Mohammad Solh, Director, Int'l Islamic Salvation Health Center, Baalbeck
27. Ms. Asma Kudahi, Program Officer, UNFPA
28. Dr. Bassel Doughan, Chairman, Dept. of Dental Public Health, Lebanese University
29. Dr. Mounir Doumit, Director, School of Dental Health, Lebanese University

## LIST OF MAIN REFERENCES

- Ministry of Social Affairs & UNFPA (1996). Population and Housing Survey.
- Administration Centrale de la Statistique (1998). Conditions de Vie des menages en 1997.
- Administration Centrale de la Statistique (1997). Conditions de Vie des menages dans la region de Baalbeck-Hermel en 1997.
- PAPChild (1996). Lebanon Maternal and Child Health Survey.
- Lebanese Family Planning Association (1988). Maternal and Child Survey Hermel-Beqaa.
- Consultation & Research Institute (1998). Poverty and Gender Profile in the Baalbeck-Hermel Region.
- Kyriakos, H. (1995). Health Aspects (Baalbeck-Hermel).
- Jamal, N. et. al. (1997). Survey of a Bekaa Community Health Needs.
- Department of Family Medicine, AUB (1994). Health Survey: Hermel.
- Unicef (1997). Indicators of Child Health Improvement in Lebanon. (Arabic).
- WHO (1995). Health in Social Development, (WHO Position Paper, World Summit for Social Development).
- WHO-EMRO. BMN Kit.
- WHO-EMRO. BMN Kit: A quick look.
- Government of Pakistan/ WHO (1995). A Guide for Programme Implementation and Manual for Training of the Intersectoral BMN Team.

### ANNEX 3

A total of 55 Health Centers were surveyed in the two Qadas of Baalbeck and Hermel. Of those, 15 appeared to be closed due to a number of reasons, and 40 appeared to be functional to varying degrees.

the average monthly load of patients seen at each Center was 188 patients/ month, ranging from a low of between 25-30 patients to a high of 1,300 patients (Order of Malta in Barqa). 83% of Centers claimed to keep patient files. The quality of information kept, in terms of quantity and accuracy, remains questionable.

The range of services offered at the Health Centers varied widely with some Centers offering a wide variety of medical and specialized services, while others offered only General Medicine services.

#### Services Offered by Health Centers in Baalbeck & Hermel

Service	Number	Percentage
General Medicine	40	100
Pediatrics	29	73
Ob/Gyn	27	68
Internal Medicine	15	38
ENT	20	50
Ophthalmology	16	40
Cardiology	18	45
Dermatology	19	48
Emergency Care	36	90
Dental	10	25

In terms of support services, especially pharmacy, laboratory, X-ray and ambulance services, the Centers claimed to offer the following services:

#### Support/ Diagnostic Services

Service	Number	Percentage
Pharmacy	37	93
Laboratory	3	7.5
X-ray	3	7.5
Ambulance	4	10

The high percentage of Centers offering Pharmacy services is, however, misleading. The majority of Pharmacies are very poorly stocked and are often completely out of basic medications.

In addition, 31 (or 78%) of the Centers claimed to offer Health Education services. The quality and content of these services are also questionable. The high rate, however, indicates an interest in health education which needs to be pursued.

In terms of basic equipment, again wide discrepancies were found, largely related to the range of services offered.

#### **Health Centers & Equipment found in them**

<b>Equipment</b>	<b>Number</b>	<b>Percentage</b>
EKG	14	35
Scales (Adult)	32	80
Scales (Pediatric)	30	75
Ultra-Sound	5	13
Fetal Heart Beat	17	43
Sterilizer	27	68
First-Aid Kit	25	63

#### **PERSONNEL IN HEALTH CENTERS IN BAALBECK AND HERMEL**

##### **Physicians:**

The number of physicians working at the Health Centers varied widely as did specialization. 15% of Centers were found to employ 1 physician, 23% employed between 2 and 3 physicians, 25% employed between 4 and 7 physicians, 10% employed between 8 and 10 physicians, 18% employed between 11 and 15 physicians, and 10% employed more than 15 physicians.

##### **Nursing Staff:**

Only 55% of Health Centers (22 Centers) were found to have nurses on staff. These 22 Centers were found to employ a total of 31 nurses such that 13 Centers employed 1 nurse each, while 9 Centers employed 2 nurses each.

15 Health Centers, or 38% of Centers in the area, on the other hand, were found to employ only nurse-aids.

3 health Centers (7.5%) were found to employ no nursing staff.

##### **Administrative Staff:**

38 Centers (or 95%) reported employing administrative staff, of which the majority (78%) reported employing 1 administrative staff, while 7.5% reported employing more than 3.

##### **Social Workers:**

A total of 14 Social Workers were found to be working in 11 Health centers. the other Centers employed no Social Workers.

Other Staff:

- 22 Health Centers employed Cleaners
- 6 Health Centers employed Drivers
- 1 Health Center employed a Guard
- 1 Health Center employed a Midwife

#### ANNEX 4

Nursing and Para-medical staff working in the Health Centers in the area of Baalbeck and Hermel were surveyed. Each was asked to fill out a short, brief questionnaire which included information of formal training, degrees held, and areas of further training they felt they needed.

A total of 94 Nursing and Para-medical staff were found to be working in the Health centers. The degrees held by those were divided as follows:

- 21 Nurses (mainly BT)
  - 4 Midwives
- 37 Nurse-aids (mainly BP, or certificates approved by the Ministry of Public Health)
  - 3 Laboratory Science Certificate
  - 1 X-ray Certificate
  - 1 Social Worker Degree
  - 1 B.S. in Health Sciences (AUB)
  - 1 B.A. in French Literature
  - 2 Baccalaureate
- 23 No Degrees

The average age of para-medical workers was found to be 32 years, with 6.5% (6) being less than 20 years old and 24% (22) being older than 40 years.

The average years of experience that these para-medical personnel had was 7 years, with 11% (10) having between 1 and 2 years experience, while 11% (10) had more than 20 years of experience.

Of the 94 health workers asked, 87 (or 93%) said they felt they needed some further training. The type of training and training topics requested were found to be as follows:

- 32 felt they needed further training in all areas (34%)
  - 23 felt they needed further training in Health Education (24%)
  - 22 felt they needed further training in Childhood Illnesses (23%)
  - 12 felt they needed further training in Chronic Diseases (13%)
  - 9 felt they needed further training in Family Planning (9.5%)
  - 8 felt they needed further training in Pregnancy and Pre-natal Care (8.5%)
  - 5 felt they needed further training in First-Aid (5%)
  - 4 felt they needed further training in the use of Computers (4%)
- 17 felt they needed further training in various subjects such as "nursing", accounting, dental care, drug use and management, environment, pharmacy management, x-ray, laboratory, public health, Thalassemia, child rearing, cardiology, infectious diseases, and gynecology (18%)



## ANNEX 5

### HEALTH COORDINATOR

The Health Coordinator for health-related programs of the UN-IRDP for Baalbeck and Hermel, must fulfill the following functions:

1. Reports to Health Sub-Committee through the IRDP Director.
2. Is responsible for the Health Administrative Assistant/ Driver and the Accountant.
3. Coordinates and carries out day-to-day management of Health programs and activities within the scope of the Baalbeck-Hermel project.
4. Liases with Representatives/ Coordinators of other agencies working in the health sector in the area of Baalbeck-Hermel.
5. Heads the Coordination Team, which includes representatives of the Ministry of Public Health, the Ministry of Social Affairs, Unicef, and UNFPA, and is responsible for coordination among members, arranging meetings and ensuring follow-up.
6. Is directly responsible for support and supervision of the progress of daily work in the 6 Health Centers of Baalbeck, Hermel, Irsal, Shmistar, Nabi-Sheet, and Deir el-Ahmar.
7. Is responsible for the support, monitoring, and supervision of all other health activity components such that activities proceed according to schedule.
8. Is involved in establishing and supervising
9. Prepares regular progress reports on project implementation to the Health Sub-Committee, identifying problems encountered and suggesting solutions and relevant actions.

The Health Coordinator for health-related programs of the UN-IRDP for Baalbeck and Hermel, should have the following qualifications:

1. A Masters' of Public Health degree.
2. Relevant field experience of at least 5 years.
3. Be resident of the Baalbeck-Hermel area, or the Beqa'a.