



UNMAS

United Nations Mine Action Service

Joint Assessment Mission Report



LEBANON

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LEBANON ASSESSMENT MISSION REPORT

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List of Acronyms

AP mines	Anti-personnel mines
AT mines	Anti-tank mines
CCW	1980 Convention on Certain Conventional Weapons
GDP	Gross domestic product
GIS	Global Information System
GNP	Gross National Product
HDI	Human Development Index
ICRC	International Committee of the Red Cross
IDP	Internally Displaced Person
LRC	Landmines Resource Center
NGO	Non-governmental organization
UN	United Nations
UNDP	United Nations Development Programme
UNIFIL	United Nations Interim Force in Lebanon
UNICEF	United Nations Children's Fund
UNMAS	United Nations Mine Action Service
UNOCHA	Office of the Coordination of Humanitarian Affairs
UNWRA	United Nations Relief and Works Agency for Palestine Refugees in the East
USAID	United States Agency for International Development
UXO	Unexploded ordnance
WHO	World Health Organization
WRF	World Rehabilitation Fund

LEBANON ASSESSMENT MISSION REPORT

I. BACKGROUND

Lebanon's problem with landmines and unexploded ordnance (UXO) is a direct result of the civil war that started in 1975 and ended with the cessation of hostilities on 13 October 1990. Further complicating the situation has been the ongoing occupation by Israeli forces of the southern part of the country. As a consequence of these events, it is estimated that 150,000 landmines of all categories are currently emplaced in Lebanon. The exact location of most of these weapons remains unknown. In addition, a large number of UXO continue to pose a serious threat to local populations, particularly in the south.

Following the end of the war, landmines became one of the most serious problems facing civilians as they began to reclaim their homes, and undertake the post war reconstruction process. The problem has been particularly acute in the capital of Beirut. In an attempt to effectively address the situation, engineering units of the Lebanese Army subsequently conducted reconnaissance and assessment missions to gather detailed information about the minefields and suspected areas in order to commence mine clearance operations.

Recognizing the serious humanitarian nature of the problem and with a determination to further strengthening their mine action capacity, the Lebanese authorities have asked the United Nations for support. In November 1998, following consultations with its UN partners, the United Nations Mine Action Service (UNMAS), acting in its capacity as focal point for all mine-related activities within the UN system, offered to field a multidisciplinary interagency mission to assess the requirement for UN assistance.

The mission, which took place from 1 February to 5 February 1999, was led by Mr. Wolfgang Hirsch, UNMAS Programme Officer, in charge of Lebanon. It included the following team members: Dr. Ghulam Popal, Programme Officer, WHO; Mr. Chris Horwood, Consultant, UNOCHA; Ms. Tehnaz Dastoor, Focal Point for Landmines, UNICEF and Mr. Leon Terblanche, Mine Action Specialist, UNDP.

The team met in Beirut with Government representatives, including the Minister of Defense, the commander of the Lebanese army, and officials from the Ministry of Foreign Affairs, the Ministry of Health, the Ministry of Social Affairs, the Ministry of the Displaced and the National Demining Office. The team also met with representatives from the French, German, and US (USAID) diplomatic missions. In addition, it consulted with various UN agencies and national and international NGOs operating in Lebanon, including *inter alia*, the United Nations Development Programme (UNDP), the United Nations Children's Fund (UNICEF), the World Health Organisation (WHO), the United Nations High Commission for Refugees, the United Nations Relief and Works Agency for Palestine Refugees in the East (UNWRA), the United Nations Interim Force in Lebanon (UNIFIL), the Landmine Resource Center (LRC) at the University of Balamand, the World Rehabilitation Fund

(WRF) and the International Committee of the Red Cross (ICRC). The assessment team also went on a field visit to Souk el-Gharb.

The assessment team would like to acknowledge the support provided by the UN Resident Co-ordinator and the UNDP staff throughout both the planning and the execution of the mission and to express its gratitude for their assistance. Full co-operation was also extended to the team by the authorities of Lebanon. In this regard, special thanks should go to the Minister of Defense and especially to the President of the National Demining Office.

This report presents the main findings of the inter-agency mission as a result of its intensive consultations in the field, as well as its key conclusions and recommendations.

II. OBSERVATIONS

II.1 Current Environment

II.1.a. Political and security environment

Political Background

Lebanon is a parliamentary republic with a sectarian-based electoral system that, historically, has been dominated by a handful of political families and strongly influenced by the presence of disparate regional powers. The Government is headed by a *Atroika*, which traditionally has consisted of a Maronite Christian President, a Sunni Muslim Prime Minister and a Shia Muslim Speaker of the Chamber of Deputies. Until 1990, executive power was predominately held by the president. However, following the Taif Agreement, which transformed the political system, the principal responsibilities of the office were consigned to the Council of Ministers (or cabinet) establishing the prime minister as the most powerful figure in the government. The current size of the Parliament is 128 seats; half of which are reserved for Christians and half reserved for Muslims.

Western style party-politics are, for the most part, absent from Lebanon. Rather, individuals, families and religious communities dominate the political culture. The Shia Muslims are the largest single sect in Lebanon and perhaps the most unified. Within the Sunni community, the power tends to be more diffuse. Before the 1975-1990 Civil War, Lebanon was, for the most part, controlled by the Christians. However, since the 1989 Taif Agreement, their power has diminished considerably due to the gradual reduction in their demographic strength. Today, seven organised groups or factions dominate the political culture: the Hizbullah (Shia), Amal (Shia), the National Liberal Party (Christians), National Bloc (Christians), the Kataeb Party (the largest Christian party), Progressive Socialist Party and the Syria Socialist Nationalist Party.

In October 1998, in an election that was influenced by the proximity of neighbouring regional powers as much as domestic issues, the Parliament chose former Army Chief of Staff, General Emil Lahoud as president. Almost immediately following Lahoud's taking

office in November, the man most responsible for Lebanon's post-civil war resurgence, Prime Minister Rafiq Hariri, resigned. Succeeding him is a 69-year-old economist Salim al-Hoss who, as a consensus selection has widespread sectarian support. Al-Hoss is considered highly competent, but lacks the drive or vision of his predecessor. Hariri's departure has now effectively shifted the balance of power from the Prime Minister's office to the Presidency and General Lahoud.

According to a recent UNIFIL report, under President Lahoud and Prime Minister Hoss, little change in Lebanon's regional and foreign policy is to be expected as neighbouring countries will continue to assert considerable influence over the policy making environment. The main issue will continue to be the peace process and the Israeli occupation of southern Lebanon, now in its 21st year.

Security Environment

Since 1978, the United Nations Interim Force in Lebanon (UNIFIL) has maintained a presence of over 4,500 troops in the southern region of the country whose mandate is to confirm the withdrawal of Israeli forces, and to restore international peace and security. UNIFIL is also charged with the responsibility of assisting the government of Lebanon in ensuring the return of its effective authority in the southern region (SC RES 425). On 28 January 1999, the Security Council extended its mandate until 31 July 1999 (SC RES 1223).

Implementation of UNIFIL's mandate, however has been difficult, if not impossible. The effectiveness of UNIFIL's role lies in its ability to limit hostilities and protect the inhabitants. However, continued incidents between the Israeli Defence Forces (IDF) and the local Lebanese auxiliary, the de facto forces (DFF) and armed elements (AE) that have proclaimed their resistance against Israeli occupation overextends UNIFIL's capacities. Despite Israeli suggestions of withdrawal, subject to security arrangements, the situation, for the moment, remains intractable.

Several recent incidents have raised the level of tension on all sides of the border. In February 1999, Israel absorbed the Shiite village Aroun into its security zone. Israel's top ranking military officer in the region along with two soldiers and a journalist were killed by remote controlled Hizbullah bomb attacks. Armed Elements (AE) continued to fire upon both the IDF and UNIFIL positions. During the period of July 1998 to mid-January 1999, UNIFIL recorded 386 operations conducted by AEs. The vast majority of the operations were carried out by the Islamic Resistance, the military wing of the Shiite Muslim Hizbullah. The Shiite movement, Amal, took responsibility for some 30 operations.

The concern, of course, is the escalation of hostilities particularly in leading up to the Israeli general elections, scheduled for May. The Secretary-General observed that the fighting continued at an increased pace and the situation in the area continues to remain volatile and dangerous. In recent weeks, within the UNIFIL area, tension levels have varied from low to medium. Several of the battalions have experienced intermittent threats and harassment by AEs while on patrol in their areas.

II.1.b. Humanitarian/economic environment

The economy of Lebanon is currently in a state of recovery and rehabilitation following the direct and devastating effects of the 1975-1990 conflict. The outbreak of war in 1975 interrupted the course of national development at all levels. The extent of its effects has impacted on most areas of the country. It has destabilized the economy, weakened the national currency and gave rise to rampant inflation. During this period, economic growth was brought to a complete halt; foreign investment ceased; external trade transit was severely curtailed due to lack of security; tourism no longer existed; agricultural production was in ruins and many industrial establishments destroyed.

Not only did Lebanon suffer the obvious socio-economic implications of these factors, but also the country remained isolated and unable to benefit from the rapid progress of technological developments that seemingly drove the global economy during this period. In 1990, the Lebanese GDP was estimated to be only 33% of its 1975 level. National assets measured in material losses are estimated at around US\$ 25 billion, with approximately 65,000 citizens killed and many thousands of educated, professional and skilled individuals fleeing the country.

Since 1990, following the cessation of conflict, the initial economic recovery has been remarkable and rapid. Currently, the GDP is estimated to be at 75% of the prewar level, with a high growth performance average of 7.1% over the 1993-95 period. As economic recovery and national reconstruction continue, it is anticipated so will such levels of growth. From the staggering inflation rates of 1990, reaching a level 120% in 1992 the current inflation rates have fallen below 10 percent. Per capita incomes have tripled in the same period. The government has resumed a strong central control of development and administration while an open and liberal economic system is favorable to foreign and private investors. There is once again availability of skilled manpower and entrepreneurs as the private sector of commodity and services-production assumes the leading role in the economy.

A 1996 assessment indicates that by sector, only 7.7% of the labor force are engaged in agricultural production while 19% operate in industry, 10% in construction and 63.3% work in the service sector. The agricultural sector now employs approximately 35% of its 1970 levels, reflecting a shift in the profile of the economy. Out of a population of 3.5 million, the labor force in Lebanon is estimated to be 1.1 million with an unemployment rate of approximately 12-14%.

Relief, reconstruction and development planning and financing have been the primary considerations of the different Lebanese governments since 1990 as well as the international financing and development institutions. Various on-going national and sectoral plans are underway as well as the launching of new economic initiatives. Large amounts of available foreign funding from more than 20 external funding sources enable Lebanon to execute wide-ranging reconstruction and development.

The robust and fast-recovering appearance of the Lebanese economy does not mean that all sections of the country or all sectors of the economy are directly benefiting from the growth.

The UNDP Human Development Index (HDI) offers an alternative to GDP for measuring the relative socio-economic progress of nations. For 1996, Lebanon's HDI ranking was 97 out of a total of 174 countries. In most areas of categorization, despite the effects of the war, the HDI values for Lebanon are higher than those of the Arab states.

At a general level it may be noted that life expectancy in Lebanon is over 69 years while adult literacy is as high as 92.4%. Only six percent of the population lives without safe water and health services. In 1995 the GNP per capita in US\$ was 2,660. However those working in agriculture in rural areas are the poorest sectors of the labor force with over 75% earning less than US\$500 per month. Information points to considerable variation in the spread of poverty among regions and sectors. UNDP reports indicate that apart from the agricultural laborers the poorest people live in the suburbs of Beirut and other capitals. Areas of *abject* poverty are cited in Akkar, Baalbeck and Bekaa regions.

The difficulty in using quantitative data alone (often monetary equivalents) to categorize levels of poverty and prosperity has led analysts to develop the Unsatisfied Basic Needs methodology to improve understand of *relative* poverty in nations. Such a method was used in the 1998 mapping of Living Conditions in Lebanon conducted by the Ministry of Social Affairs and UNDP. Their findings, covering indicators within the four groupings of Housing, Sewerage and Water, Education and Income-related indicators, suggest that there are 32.1% of all households living below the satisfaction threshold. Of these, 7.1% of the households report a 'very low degree of satisfaction'. Their findings indicate, however, that deprivation expressed by low-income levels in Lebanon is probably more widespread than forms of deprivation related to the availability of basic material and social services. A detailed description and analysis of socio-economic indicators, or a comprehensive sectoral breakdown is not within the scope of this assessment paper. Furthermore, in the absence of clear indications of the predominant locations of mines and UXO in the provinces, a regional breakdown of socio-economic factors would be of limited relevance.

The presence of numerous international and national NGOs throughout Lebanon, the flows of international assistance, the creations of national governmental structures and the continued present of different United Nations agencies indicates that in Lebanon as a whole, specific sectors and household groups are assessed as needing assistance. However the agendas of these different agencies also indicates that they are responding to different socio-economic issues at a different level than their equivalent organization in developing countries and other post-war regions. Less of an emergency, basic needs strategy and more of an empowerment and opportunity-increasing emphasis. In addition to this the team learned that fund-raising for Lebanon (as opposed to lending and investment) was

increasingly difficult to source as the international perception was that the humanitarian conditions in most sectors have improved considerably in recent years.¹

II.2. The landmine/UXO threat

II.2.a. Origin of the problem

According to military sources, landmines were emplaced in Lebanon from 1975 to 1990. The majority of the parties who participated in the war used landmines to consolidate their defensive positions along the demarcation lines, which has moved many times. Most of these landmines were deployed indiscriminately and hastily without any records. Only some of the mine fields and suspected areas are fenced and marked.

Since 1990, mine clearance, addressing humanitarian and rehabilitation needs, has been conducted successfully by the Engineer Regiment of the Lebanese Army, which is well structured to implement these tasks. According to a briefing paper which was made available to the mission team 743 minefields with approximately 3,183 AT mines and 24,271 AP mines were counted in Lebanese territory, except the occupied areas, as of December 1998. Of these 471 mine fields and suspected areas were treated and almost 2,383 AT mines and 23,693 AP mines and a large number of UXO have been removed between 13 October 1990 and 1 December 1998 by the Engineer Regiment. According to sources, 208 treated/cleared mine fields still remain suspected areas of being unsafe. In addition, an estimated 30,000 unexploded ordnance are scattered in the Lebanese Territories occupied by Israel.

The AP mines laid by the Lebanese Army and/or militias and non-Lebanese parties are of Russian, Belgian, France, Israeli, Italian, Chinese, US, and Swedish origin. Some of the mines are of a low-metal variety that makes them difficult to detect, and they have an almost unlimited life span. The AT mines are mostly of Russian, Italian, Yugoslavian, and US origin.

II.2.b. Current situation

According to the Lebanese authorities, the contaminated areas are in Beirut (along the green line or the old demarcation line), North Metu (Wadi Jamajem, Sanine, Ain Teffahah, Zeghrine), Upper Metu (along the old demarcation line of Krayeh, Raas El Tarf and Aarbanieyeh), Kessroun, Byblos and Batroun (along old demarcation line), Chouf, Souk El Gharb (along old demarcation line), and Bekaa El Gharbi - Falouj. Apart from the known, fenced mine fields there are many unidentified and unmarked mine fields that cause casualties from time to time.

According to information provided to the team by the commander of the engineer regiment, as of 1 December 1998 the total number of mine fields and suspected areas which

¹For this section the following source documents were used. 'A Profile Of Sustainable Human Development In Lebanon' UNDP 1997. 'Development Cooperation: Lebanon': UNDP 1998. Ministry of Social Affairs/UNDP: 'Mapping of Living Conditions in Lebanon: 1998'

were untreated is 272. They know according to the records that there are 24 AT and 2881 AP mines in the fields. But there are numerous contaminated areas throughout the country that remain unknown and require survey.

Many available records are considered inaccurate for the following reasons:

- because most of the mine fields were implanted at night in the vicinity of the FEBA and under extreme situations, records were reproduced later, relying on memory;
- mines were added to the fields without adjustments of records because of the many changes by the occupying forces in the demarcation lines;
- minefields were subject to continuous shelling and fires, which caused the explosion of mines and shifted the location of others,
- weather conditions further shifted the locations of mines.

Although most of the mined areas have been cleared by the military, the actual status of these clearing operations remains unknown. As a result, mines and UXO are often found by farmers, who usually inform the local NGOs or authorities. The army disposes of mines by detonating them in place.

II.3 The consequences of the presence of Mines/UXO

II.3.a. Mine/UXO accidents

As with most mine-affected, post-conflict countries the assessment team encountered a situation where only partial information currently exists concerning mine and UXO related accidents in Lebanon. Information *is* available but due to the fact that most relevant 'mine-conscious' organizations and government agencies are relatively new, specific and detailed information has yet to be comprehensively cataloged in, for example, a national database.

Unlike many other mine-infested countries, Lebanon has a countrywide network of formal and informal structures, consisting of governmental and non-governmental agencies that provide close surveillance on areas affected by mines. The capacity of such an extensive system suggests that it is likely that records on victims of mine accidents are being documented at some level. Telecommunication systems, computerization of administration and functioning infrastructure operate throughout the southern, occupied part of Lebanon as much as they do in the rest of the country. Additionally, the culture of close extended family networks has proved to be an effective, informal source for mine awareness activities. Their concern and oversight for family and neighbors has been instrumental in preventing accidents. Consequently, the assessment team considers the existing reports and surveys to be indicative of the real situation, however the *absence* of a large volume of reports proves to be significant. We therefore infer that additional 'hidden' or unreported accidents are not occurring with any regularity.

Particular surveys are currently in process under the auspices of the World Rehabilitation Fund (WRF) and the Landmines Resource Center (LRC) to quantify the problem of mines and UXO throughout Lebanon.

Below is an overview of the most pertinent information obtained during the mission.

1) The Ministry of Social Affairs with the UNPF has registered handicapped persons by type and cause in Lebanon in 1996. *Cause* is subdivided into five categories: 1) accident, 2) since birth, 3) illness, 4) war and 5) others. Mine and UXO accidents are included in the 'war' category which includes 11.9 % (3,561 persons) of the national total of 29,866 handicapped persons. This of course does not include those *killed*² by mines or UXO.

2) In 1996 the World Rehabilitation Fund (WRF) and the Ministry of Health with several community based organizations (CBOs) undertook a survey of the Lebanese landmine problem. The first phase of the study was carried out in the Bekka Region and covered what is considered to be the most infested areas: West Bekaa, Rashaya, and Habaya. It was undertaken with the close coordination and cooperation of a local NGO "The Welfare Association for the Disabled and Elderly People in Rashayya and West Bekaa". This activity was supported by World Rehabilitation Fund. Their findings concluded that in 52 out of 65 villages, the civilian accidents from 1975 to 1996 resulted in 212 injuries and 189 deaths out of a total population of 200,000. The details of this study show that the majority of the accidents occurred during specific events such as the 1982 invasion of Lebanon by Israel and the 1991 return of previously displaced civilians to the area.

3) The opinion of the LRC is that the annual rate of accidents has seasonal variations (during the harvest period it increases) but overall remains low. An estimate of **three** accidents per month was quoted by the LRC nationally, although in the harvest period (September to December) this figure could go as high as **four** per *week*, as there is an increase of workers in areas that are normally unfrequented.

4) Currently the LRC estimates there to be 1,200 survivors of landmine or UXO accidents in Lebanon.³

5) The team was also given, by the Military, the number of victims affected by mine explosions from 1/10/1990 till 1/7/1997

YEAR	CIVILIANS		MILITARY	
	Killed	Injured	Killed	Injured
1990	12	15	-	8
1991	36	78	5	34
1992	11	41	3	14
1993	23	33	-	12
1994	23	32	2	10
1995	16	15	1	5

²From figures of death and injury established in the West Bekaa and Rashiaya survey the team noted that a high proportion of injuries resulted in death. This normally points to poor facilities at the initial health post or difficulties in getting casualties to immediate medical services. It may also reflect the kind of mines and UXO existing in Lebanon.

³As stated in the information leaflet of the Landmine Resource Center, University of Balamand.

1996	6	18	1	1
1997	7	17	-	1
TOTAL	134	249	12	85

Further surveys are currently underway in an attempt to more accurately document the scope of the past and present problem of mines and UXO in Lebanon.

Furthermore, Lebanon is a culture that in peacetime the inflicting of any injuries and loss of life from landmines and UXO is not to be expected. When incidents do occur, a sense of outrage is pervasive among the population. However, even during the mission there was some degree of ambivalence amongst different agencies interviewed⁴ as to whether the level of on-going incidents are of significance, and whether there is a need for international support towards a national response.

II.3.b. Humanitarian and socio-economic impact

As currently understood, in terms of direct human impact (death and injury) the mine/UXO problem in Lebanon is a limited problem both in location and number.

At the national level the socio-economic damage and impact of the presence of landmines and UXO is very limited and cannot be considered a major impediment to social development or economic activity. Yet to the families and immediate communities involved in accidents and deaths the impact is colossal. There may also be a limited number of small communities that are directly restricted in their social and economic development because of the presence of abandoned mines and UXO. However, as of this writing, minimal evidence exists to support this.

1) The road networks throughout the country, medical facilities, schools, resettlement, water and sanitation facilities, industrial and agricultural activity and social activity is not restricted or compromised by the presence of mines and UXO.

2) In the occupied southern areas of Lebanon there are several minefields and extensive UXO but according to our interviews (Ministry of Health and UNIFIL etc) these areas are both well known and marked. It is extremely rare for civilian accidents to occur in this region. This information has been corroborated by ICRC who provides assistance in the area and who documents reports of such injuries.⁵

3) There are over 360,000 Palestinian refugees residing in various camps in Lebanon under the care of UNRWA. UNRWA staff stated that mines and UXO were not considered a problem to the welfare of the refugees nor had they any evidence of injuries or deaths in recent years. The provision of aid and support to the refugees was never affected by the threat of mines/UXO.

⁴For example the UNIFIL in the occupied south, ICRC and UNHCR .

⁵The ICRC representative claimed that they heard of a mine or UXO injury only once every 3 months or so.

4) Other refugees in Lebanon (from Iraq, Sudan, Algeria and different African countries) numbering only 5,000 were also unaffected by landmines. UNHCR confirmed that although many of these refugees lived in urban suburbs and also in marginal rural areas they had never received any report of accidents or socio-economic impediments in relation to the weapons.

5) The Ministry of the Displaced is responsible for the resettlement of 90,000 internally displaced families (average 5.7 persons per family). Only 25% of these families have been resettled in their home areas (mainly Chouf, Aaley and Baabda). The slow rate of the resettlement has nothing to do with the possible presence of mines and UXO or the fear of their perceived presence. The speed of the ministry to repair/rebuild housing, relocate communities, provide new health, educational and religious services are the reasons for the slow resettlement rate. It remains to be seen whether those resettled will encounter landmines in their local areas.⁶

6) Agricultural production engages approximately 7.7% of the labor force and 25% of Lebanon's total land area is arable.⁷ Most reported accidents to date involve farmers and children from agricultural families. At currently understood levels of risk and injury the socio-economic impact is very limited. In some specific areas access to land use is restricted due to knowledge of, or suspicion of mine fields. But this too, appears to be very limited.

7) Different reports and surveys from government ministries, development organizations and the UN concerning the state of socio-economic affairs in Lebanon have been completed. Apart from reports prepared directly for this assessment mission there was no mention of landmines and UXO in any section of those reports reviewed. This could indicate that relative to other issues facing Lebanon, landmines have a very low order of priority. It could also suggest that the problem is underestimated or misunderstood.

There are some notable examples where mines and UXO do present a visible socio-economic threat and deserve mention:

- The famous tourist area of Tannourine forest (Cedars of Lebanon) has been mined. The cedars are currently infected by a disease that cannot be treated, as experts cannot enter the forests before the area is verified and cleared.
- The LRC mentioned that in some pine forest areas (pinecones are a luxury cash crop for some communities) the presence of mines prevents harvest of the cones causing economic hardship among affected communities.
- The Lebanese use highland areas of Mount Lebanon for tourism and day visits. Due to unmarked and random mine lying in the area, there have been instances of injuries and deaths among tourists.

⁶It should be noted that the representative from the Ministry of the Displaced strongly believed that in the absence of information concerning minefield locations the relocated families would eventually be at risk as the resettlement process continued. He felt that survey and verification of proposed resettlement areas were essential and claimed that there had been anecdotal reports of accidents already involving relocated families. No evidence for this was available.

⁷1,023,000 hectares = total land of Lebanon

- The Ministry of Displaced considers it critical that areas where families are being resettled be verified and cleared of landmines to prevent a future humanitarian crisis among those resettled.

A full assessment of the real socio-economic impact of mines and UXO in Lebanon is impossible to ascertain due to the lack of available data. Also, survey and monitoring of affected communities has not occurred to a level sufficient enough to draw definite linkages between the mine threat and socio-economic deprivation.

II.4 Capacities and current activities that deal with the problem

II.4.a. Detection and clearance

Following the end of the conflict in 1990 the Lebanese armed forces began to address the threat posed by mines. According to the military, between 1990 and 1998 the majority of known and identified mine fields have been cleared. The Engineering Regiment consists of four demining companies with a total of 240 deminers. The mine clearance operation, addressing the humanitarian and rehabilitation needs, has been successfully conducted. Their work very often is reactive rather than proactive because they are responsible for all countrywide mine clearance/UXO operations. Quite frequently, their work is interrupted, delayed or stopped altogether because of emergency requests from downtown Beirut or other areas.

The clearance operations were mostly conducted by manual techniques (prodding) rather than with technical means like mine detectors etc. Deminers are reluctant to use them since the majority of the AP mines tend to be plastic and the land saturated with metallic fragments and shrapnel. Because mine fields are often located away from roads in areas inaccessible to mechanical devices it is impossible to use rollers. Progress is slow, and there is a need to operate with great speed and effectiveness.

To strengthen local capacities, the US Government has provided technical assistance towards developing and upgrading human and technical demining capabilities.

To economize future activity, co-ordination started among all concerned on developing an operational plan of action at the national level. It was launched by the Lebanese Army, governmental agencies, NGOs and CBOs within the framework of the National Demining Office (NDO). The NDO was created in accordance with Council of Ministers' resolution No. 29, of 15 April 1998. The main goal of the NDO is to clear the country of landmines and UXO's and increase the Lebanese population's awareness of the problem and prevent further injury through mine awareness programmes and campaigns.

Mine clearance priorities are established by the NDO and presented to the Chief of Operations for approval. The requirements for mine clearance are submitted to the NDO by Ministries, and other sources, in an ad-hoc manner.

II.4.b. Mine awareness

Mine awareness education is being undertaken within the NDO and is implemented by the Lebanese Army, NGOs and CBOs. . The WRF provides the financial support and technical assistance for these activities. No attempt by this assessment team has been made to evaluate the current neither mine awareness programs nor the various communication strategies to disseminate messages.

Currently, mine awareness programs are being undertaken in targeted areas by the Lebanese Army and the NGO community in coordination with local CBOs. A Technical Committee on Mine Awareness has been established in partnership between the World Rehabilitation Fund (WRF), the Landmine Resource Centre and the NGO community.

WRF, in partnership with the local professionals and practitioners within the LRC and NGO communities, has organized a Technical Committee on mine awareness education. This committee reviews the validity of current mine awareness communication tools and strategies. It also evaluates current programs.

II.4.c. Victim assistance

The health care system in Lebanon is characterized by an inverted structure with resources concentrated in primarily technology. Health costs are high and individual households often pay for medical bills. Inchoate state sponsored social insurance programmes, consequently lead the Ministry of Public Health to allocate more than 80 percent of its budget toward hospitalization costs. Often to private hospitals for persons not covered by any social programmes or medical insurance.

The strength of health care system in Lebanon rests on the quality and quantity of available resources like hospital bed, advanced technology and medical expertise. These resources have made possible the observed overall high level of accessibility to health care services. The inverted nature of the Lebanese healthcare sector tends to concentrates resources in tertiary care rather than in secondary and primary health care levels. Primary health care is still fragmented with no sound linkages to the higher levels. There is a strong case for adaptable, simple and affordable technologies at the first and secondary levels, and for heavy emphasis on health promotion, disease prevention and rehabilitation services.

Pre-hospital care is one of the weakest parts of the health care system in Lebanon. The existing services are rudimentary and concerned with transportation and transfer of patients. The services are diffused and their management is uncoordinated. They are completely dependent on voluntary staff, which are often inadequately trained and equipped. Some data suggest that around 20% of emergencies are transported by first aid teams; while 80% reach emergency rooms by their own means, often inadequately transported by family members or others.

The private sector is the main source of ambulatory medical care in the country. NGOs are very active in the provision of health care through a large network of some 700

health centres and dispensaries, distributed all over the country. The structure of these health centers varies. Some are well staff, with various specializations and extensive equipment while others are poorly equipped in terms of facilities and staff.

II.4.d. Advocacy and international conventions

Although the Lebanese Government appears to be sympathetic towards the international ban on anti-personnel landmines, due to the on-going conflict, it is currently unwilling to sign the Ottawa Convention and the amended Protocol II of the Convention on Certain Conventional Weapons (CCW).

The Government of Lebanon has indicated its intention to sign both Landmine Conventions as soon as GA Resolution 425 is successfully implemented and the Government of Israel signs the same Conventions.

It may be noted that the Lebanese Government is already implementing some of the activities that they would be required to undertake as signatories of the Ottawa Convention.

III. CONCLUSIONS AND RECOMMENDATIONS

III.1. Conclusions

III.1.a General

- Based on the available information, it is the opinion of the assessment team that currently, landmines and UXO do not constitute a humanitarian emergency in Lebanon. Nevertheless there is a current, continuing and anticipated future threat posed by landmines in Lebanon that must be both assessed and addressed.
- Generally, in terms of meeting the humanitarian needs of the population, Lebanon already has appropriate institutions in place --- the Lebanese army, the NGOs, government ministries --- to tackle the threat posed by mines. Specifically, with newly formed bodies such as the Landmine Resource Center (LRC), the National Demining Office (NDO) and the Humanitarian Demining Office (HDO), the relevant parties appear to have the framework for cooperation and coordination that is vital to a successful approach.
- Assistance to mine victims must be addressed as part of the overall strengthening of the health sector in general.
- The GIS capability at the LRC could be very useful as a decision-making and prioritization tool for mine action, and for the production of maps for planning and information dissemination purposes.
- Major donors are generally supportive of mine action activities in Lebanon.

III.1.b Detection and clearance

- The number of deminer casualties and observed operating procedures seem to indicate that demining is not always conducted in accordance with the international standards for humanitarian mine clearance. It is noted that the military have changed certain procedures in an effort to reduce demining casualties during their operations.
- It is noted that Lebanon may not have sufficient resources to expand current demining capabilities, and may be unable to include alternative technologies such as dogs.
- Additional training may benefit the overall ability of the military to continue their objectives in line with the international standards for humanitarian mine clearance. This could be achieved through an in-kind contribution of qualified instructors.

III.1.c Mine Awareness

- The results of a 1996 preliminary household survey indicate that a problem exists in certain areas due to the presence of landmines. Following the survey, the WRF, through

the LRC and CBOs, commissioned a comprehensive national survey (currently being administered) on the effects of landmines on the local populations.

III.1.d Victim Assistance

- The Ministry of Health has a great potential and it has operational framework institution to contribute to the development and implementation of a comprehensive mine action programme in Lebanon. The Ministry of Health, with the assistance of national and international agencies, should take the leading role in coordinating and strengthening a comprehensive victim assistance programme. Which covers the surveillance, pre-hospital, hospital and rehabilitation aspects of mine action programme in the country.
- The assessment team agrees that there is no 'acceptable' level of injuries in any country even if the national rates of injury may be lower than the more mine-affected countries. Whether the situation in Lebanon constitutes justification for international support, in an environment of competing needs for scarce resources, is the question that has to be answered.

III.1.f National Mine Action Structure

- Mine action needs are not yet completely defined on an inter-ministerial basis and consequently lack effective coordination and prioritization.
- As mentioned earlier, several effective but independent initiatives and structures exist in relation to mine action activities. These are sound building blocks for a national and integrated approach.
- WRF has been instrumental in building capacity and introducing the humanitarian dimension to the national programme.

III.2. RECOMMENDATIONS

III.2.a General

- Donors should be encouraged to support the strengthening of the LRC and WRF, integration of all the mine action components, equipment, the utilization of dogs, training of deminers to humanitarian standards and mine awareness education.
- The team strongly recommends that the mine clearance operators match appropriate methods (choice of technologies) to tackle the specific requirements of dealing with large areas of suspected minefields, area reduction, clearance and high metal contamination. Current manual techniques will greatly prolong the tasks of area verification and clearance.
- Academic institutions and other partners should be instrumental in the development and implementation of the surveillance system. The establishment of the Landmine Resource Center in the Faculty of Health Sciences in the University of Balamand, and its aim to collect, analyze and disseminate data and information is a very positive development and needs to be supported.

III.2.b Detection and clearance

- Level 1 surveys should be conducted in the areas thought to be contaminated, and the information should be used to quantify the problem. Additional information gathered by the LRC should be centralized at the NDO.
- Lebanon needs donor support for further expansion of existing capacity. Dogs could be advisable and cost effective for checking areas where the presence of mines is uncertain, where metal fragmentation contamination is high, for area reduction and quality control.

III.2.c Mine awareness

- Following the results of the national survey on landmines in Lebanon (being currently undertaken), an accurate needs assessment of the landmine problem can be developed, and appropriate mine awareness strategies targeted to affected communities.
- To assist in local capacity building and institutional strengthening, the Technical Committee should be strengthened and supported to continue its tasks in developing a national mine awareness strategy in cooperation with the NDO.

- The LRC should be bolstered as it forms the important link between academic institutions, the international donor community, governmental institutions including the army and CBOs.
- The International Guidelines on Mine Awareness Education (prepared by UNICEF) should be widely disseminated to all those implementing mine awareness programs within the country.

III.2.d Victim assistance

- The National Committee for Mine Victim Assistance should be revitalized in order to consolidate efforts and resources and to improve coordination between various partners in this area. The National Committee for Mine Victim Assistance, when revitalized can represent the health sector in the National Demining Office.
- Care of mine victims' needs to be integrated to the management of all victims of trauma (both physical and psychosocial), violence and armed conflict within the existing framework of the health care system.
- The physical rehabilitation of mine victims should become an integrated part of the management of general rehabilitation services that care for all people, regardless of their cause of disability. Therefore, it is recommended that rehabilitation services be mainstreamed into primary health care services.
- Communities should be empowered to deliver immediate basic health care on the spot and take the victim to the closest referral center for treatment. A plan should be developed to train selected people in first aid using existing local health facilities in mine-infested areas.
- A comprehensive survey of all existing hospitals/health facilities able to provide medical assistance to mine victims in mine-infested areas should be conducted.
- Physiotherapy services should be established in the referral hospitals in each of the mine-affected Regions in order to help the mine victims as well as victims of other types of injuries and trauma.

III.2.e Ban on landmines

- As a matter of priority and with a view to minimizing the impact of landmines on civilian populations, all warring factions within Lebanon should be encouraged by the international community to comply by the provisions of the amended Protocol II to the CCW Convention.
- As part of the search for a peaceful solution to the conflict, an immediate ban on the further use of antipersonnel landmines by all warring parties should be implemented. It should be seen as a confidence-building measure based on humanitarian considerations.

III.2.f National Mine Action Structure

- Prioritization for mine action should not be established by the military in isolation, but rather within the context of the national developmental and humanitarian needs, as established through the forum of the NDO.
- Formal mechanisms should be established to involve donors, government ministries, NGOs and other relevant parties in the planning, coordination, and prioritization process.
- Victim assistance should be an integral part of the structure and mandate of National Demining Office within the NDO, which will lead to the fragmentation of efforts and resources on the issue of assistance to landmine victims.

ASSESSMENT MISSION TO LEBANON
TERMS OF REFERENCE

BACKGROUND

1. As a result of a civil war which has raged for more than fifteen years, Lebanon is believed severely affected by landmines and unexploded ordnance. The cessation of hostilities in 1990 led to the repatriation of many refugees and consequently to an increase in landmine casualties. The efforts of the Government to tackle the problem notwithstanding, 4,000 people have reportedly been maimed or killed by landmines during the past two decades.
2. There is currently no UN humanitarian mine action programme in Lebanon. Following consultations with UNDP and other UN partners, the United Nations Mine Action Service (UNMAS) has therefore offered to field a multi-disciplinary and inter-agency mission to assess the requirements for UN assistance.
3. The conduct of the assessment mission is in line with Resolution 53/26 of the United Nations General Assembly, which emphasized the important role of the United Nations in the effective coordination of mine-action activities, emphasized the importance of further multisectoral assessments and urged Member States, regional organisations, and foundations to continue to extend full assistance and cooperation to the Secretary-General.
4. The execution of the assessment mission is also in line with the UN policy on mine action as outlined in annex II ("Mine Action and Effective Coordination: the United Policy Paper") of the Secretary-General's report A/53/496 on assistance in mine clearance.

OBJECTIVE OF THE MISSION

5. The objective of the assessment team will be to define the scope and nature of the landmine/UXO problem in Lebanon, to identify constraints and opportunities relating to the development of mine action initiatives, and to make recommendations for a comprehensive response, including institutional arrangements for the coordination and implementation of mine action activities.
6. To achieve its overall objective, and based on the work and support already done, the assessment team will gather additional information on:
 - the scope of the landmine/UXO problem (location and number of mines/UXO);
 - the implications of the landmine/UXO problem;
 - the in-country capacities available to deal with the landmine/UXO problem;
 - the political and security situation and its potential impact on a mine-action program.
7. The assessment team will produce a multidisciplinary report to highlight its findings, covering all aspects of mine action; present its recommendations regarding the feasibility, scope and institutional form of a potential mine action program; and establish priorities to deal with both short-term emergency requirements and long-term capacity building requirements.

SCOPE OF THE MISSION

8. The assessment mission will look at the requirements associated with each component of a comprehensive and integrated mine action plan: mine awareness / mine risk education; information gathering / surveying / mine marking; UXO/mine clearance; victims assistance and rehabilitation; training and quality management; capacity-building.

9. The assessment mission will focus on the contaminated-areas of the country where the humanitarian impact of landmines and UXO is the most serious and where the security/political situation allows assistance to be provided. It will conduct its mission with neutrality, impartiality and humanity as required to achieve the objectives assigned.

10. The mission will be led by UNMAS and will be conducted in cooperation with the UN Resident/Humanitarian Coordinator in country. It will consult with the local civilian and military authorities; with UN agencies and (in particular UNDP, UNICEF, UNHCR, WFP and WHO), with NGOs and the Red Cross movement; and with diplomatic missions and representatives as required.

DETAILED INFORMATION REQUIRED

11. Information on the scope of the landmine problem will include the following (much of this information is already available in existing reports):

- types of mines/UXO used;
- mine laying and mine marking techniques used;
- areas known or suspected to be mined, records available;
- statistical data (when applicable).

12. Information on the impact of the landmine problem will take into consideration the following (when applicable):

- national reconciliation;
- the repatriation of refugees;
- the resettlement of IDPs;
- the delivery of humanitarian aid;
- settled populations (casualties);
- reconstruction and development;
- health services.

13. Information on the local capacities available and the mine-action activities already initiated will include the following (when applicable):

- local / national administrative structures;
- information management initiatives and capacities;
- mine-clearance initiatives and capacities (including surveying, marking and training initiatives and capacities);
- victim assistance initiatives, and medical / paramedical capacities to assist and rehabilitate landmine victims.

14. Information on the political/security situation will include the following:

- position of Lebanon vis-à-vis the Ottawa Convention and the amended protocol II to the CCW Convention;
- commitment of the various parties involved to supporting mine action actively, and to desisting from producing, stockpiling, using, and transferring antipersonnel landmines.
- position of the donor community

- potential impact of the security situation on a mine-action program.
- points of contact;

TIME FRAME

15. The assessment team will be in the field from 01 to 05 February 1999.
16. A report is to be submitted after the completion of the field mission.